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Summary/Receipt

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DEP Transaction ID: 699442
Date and Time Submitted: 11/18/2014 10:48:34 AM
Other Email :

Form Name: BWSC108 Comp. Res. Action Transmittal Form & Phase I

RTN: 3-2524
Location: FORMER PDM INC
Address: 175 INTERVALE ST, QUINCY, 021690000

Person Making Submittal
CITY OF QUINCY PLANNING DEPARTMENT
ROBERT A STEVENS
1305 HANCOCK ST
QUINCY, MA 021690000

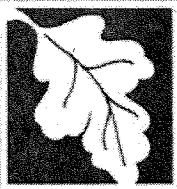
LSP
LSP #: 8188
LSP Name: JARROD P YODER

Person Making Certification
CITY OF QUINCY PLANNING DEPARTMENT
Robert A. Stevens, Jr.

Additional Forms Submitted

Ancillary Document Uploaded/Mailed
BWSC-108 Ques.B05 - Final Phase II Report - By Mail

[My eDEP](#)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC125

NOTIFICATION OF A NON-EDEP ELECTRONIC SUBMITTAL

Release Tracking Number

3 - 2524

Pursuant to 310 CMR 40.0015 (7) and 310 CMR 40.0009

A. SITE LOCATION:

1. Site Name: Former PDM, Inc.
2. Street Address: 175 & 189 Intervale Street
3. City/Town: Quincy 4. ZIP Code: 02169-0000

B. THIS FORM IS BEING USED TO:

1. Make a BWSC non-eDEP Electronic Submittal (check one and fill out Sections C, D, F, and G):

- ☐ a. The Person Making the Submittal does not have internet access, and/or will not authorize anyone that has internet access to sign electronically on their behalf. (Section F must be signed by the Person Making the Submittal)
- ☐ b. Due to an eDEP problem, I was unable to make an eDEP submittal for this transaction. (Attach email from BWSC.eDEP@state.ma.us)

Describe Problem: _____

2. Submit supporting Documentation on CD (check one and fill out Sections C, E, and G):

- ☒ a. I did not upload the supporting documentation for the submittal made in eDEP. The supporting documentation is greater than 30 mb.
- ☐ b. I was unable to upload the supporting documentation. The supporting documentation is less than 30 mb. (Attach email from BWSC.eDEP @state.ma.us.)

Describe Problem: _____

C. BWSC TRANSMITTAL FORM SUBMITTED: (check one)

- | | |
|--|--|
| <input type="checkbox"/> 1. BWSC50 Application for Special Project Designation | <input type="checkbox"/> 8. BWSC111 Audit Plan & Post Audit Completion Statement |
| <input type="checkbox"/> 2. BWSC103 Release Notification and Retraction Form | <input type="checkbox"/> 9. BWSC112 Bill of Lading |
| <input type="checkbox"/> 3. BWSC104 Permanent or Temporary Solution Statement Transmittal Form | <input type="checkbox"/> 10. BWSC113 Activity and Use Limitation(AUL) Form |
| <input type="checkbox"/> 4. BWSC105 Immediate Response Action Transmittal Form | <input type="checkbox"/> 11. BWSC115 Downgradient Property Status Form |
| <input type="checkbox"/> 5. BWSC106 Release Abatement Measure Transmittal Form | <input type="checkbox"/> 12. BWSC119 URAM Transmittal Form |
| <input type="checkbox"/> 6. BWSC107 Tier Classification Transmittal Form | <input type="checkbox"/> 13. BWSC120 Homeowner Certification Transmittal Form |
| <input checked="" type="checkbox"/> 7. BWSC108 CRA Transmittal Form & Phase I CS | <input type="checkbox"/> 14. BWSC121 Notif. of Delay in Response Deadlines |

D. NON-EDEP ELECTRONIC SUBMITTAL CHECKLIST:

- ☒ 1. Fill out Transmittal Form specified in Section C in eDEP, error check, and print completed form on paper.
- ☒ 2. Have Person Making Submittal sign the Transmittal Form specified in Section C in ink; LSP sign in ink.
- ☒ 3. Scan completed signed form, and put on CD with all required supporting documentation. Submittal does not meet the requirements of 310 CMR 40.0015(7) unless the complete package is on the CD.
- ☒ 4. Submit this completed BWSC125 Notification of Non-eDEP Electronic Submittal Form, the original signed Transmittal Form and a CD containing a scanned copy of the transmittal form and all required supporting documentation. The CD and attached documents must be submitted to the regional office either by hand, or by regular or certified mail, before applicable deadline.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC125

NOTIFICATION OF A NON-EDEP ELECTRONIC SUBMITTAL

Release Tracking Number

3 - 2524

Pursuant to 310 CMR 40.0015 (7) and 310 CMR 40.0009

E. SUPPORTING DOCUMENTATION ON CD CHECKLIST:

- ☒ 1. Complete and Submit in eDEP, Transmittal Form specified in Section C.
- ☒ 2. Submit CD to applicable regional office with this completed BWSC125 Notification of Non-eDEP Electronic Submittal Form along with a printed receipt of the eDEP Transaction. The CD and attached documents must be postmarked or delivered by hand the next business day.
3. Specify eDEP Transaction ID: 699442

F. SIGNATURE OF PERSON MAKING SUBMITTAL : (required if B1 is checked)

1. First Name: _____ 2. Last Name: _____

3. Title: _____ 4. Date: _____ (mm/dd/yyyy)

5. Signature: _____

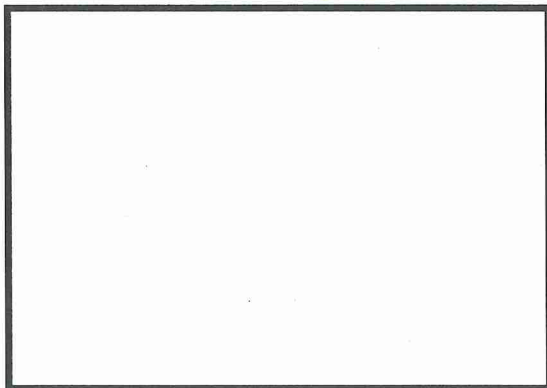
G. SIGNATURE OF LSP OR AUTHORIZED AGENT OF LSP:

1. First Name: JARROD 2. Last Name: YODER

3. Title: PROJECT MANAGER / LSP 4. Date: 11/7/14 (mm/dd/yyyy)

5. Signature: _____

Date Stamp (DEP USE ONLY:)





Massachusetts Department of Environmental Protection

eDEP Transaction Copy

Here is the file you requested for your records.

To retain a copy of this file you must save and/or print.

Username: **JPYODER**

Transaction ID: **699442**

Document: **BWSC108 Comp. Res. Action Transmittal Form & Phase I**

Size of File: **180.74K**

Status of Transaction: **In Process**

Date and Time Created: **11/6/2014:7:54:54 AM**

Note: This file only includes forms that were part of your transaction as of the date and time indicated above. If you need a more current copy of your transaction, return to eDEP and select to "Download a Copy" from the Current Submittals page.



**COMPREHENSIVE RESPONSE ACTION TRANSMITTAL
FORM & PHASE I COMPLETION STATEMENT**

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

Release Tracking Number

3 - 2524

A. SITE LOCATION:

1. Site Name: FORMER PDM INC

2. Street Address: 175 INTERVALE ST

3. City/Town: QUINCY 4. ZIP Code: 021690000

☒ 5. Check here if the disposal site that is the source of the release is Tier Classified. Check the current Tier Classification Category:

☐ a. Tier I

☐ b. Tier ID

☒ c. Tier II

B. THIS FORM IS BEING USED TO: (check all that apply)

- ☐ 1. Submit a **Phase I Completion Statement**, pursuant to 310 CMR 40.0484.
- ☐ 2. Submit a **Revised Phase I Completion Statement**, pursuant to 310 CMR 40.0484.
- ☐ 3. Submit a **Phase II Scope of Work**, pursuant to 310 CMR 40.0834.
- ☐ 4. Submit an **interim Phase II Report**. This report does not satisfy the response action deadline requirements in 310 CMR 40.0500.
- ☒ 5. Submit a **final Phase II Report and Completion Statement**, pursuant to 310 CMR 40.0836.
- ☐ 6. Submit a **Revised Phase II Report and Completion Statement**, pursuant to 310 CMR 40.0836.
- ☐ 7. Submit a **Phase III Remedial Action Plan and Completion Statement**, pursuant to 310 CMR 40.0862.
- ☐ 8. Submit a **Revised Phase III Remedial Action Plan and Completion Statement**, pursuant to 310 CMR 40.0862.
- ☐ 9. Submit a **Phase IV Remedy Implementation Plan**, pursuant to 310 CMR 40.0874.
- ☐ 10. Submit a **Modified Phase IV Remedy Implementation Plan**, pursuant to 310 CMR 40.0874.
- ☐ 11. Submit an **As-Built Construction Report**, pursuant to 310 CMR 40.0875.
- ☐ 12. Submit a **Phase IV Status Report**, pursuant to 310 CMR 40.0877.
- ☐ 13. Submit a **Phase IV Completion Statement**, pursuant to 310 CMR 40.0878 and 40.0879.

Specify the outcome of Phase IV activities: (check one)

- ☐ a. Phase V Operation, Maintenance or Monitoring of the Comprehensive Remedial Action is necessary to achieve a Permanent or Temporary Solution.
- ☐ b. The requirements of a Permanent Solution have been met. A completed Permanent Solution Statement and Report (BWSC104) will be submitted to DEP.
- ☐ c. The requirements of a Temporary Solution have been met. A completed Temporary Solution Statement and Report (BWSC104) will be submitted to DEP.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

**COMPREHENSIVE RESPONSE ACTION TRANSMITTAL
FORM & PHASE I COMPLETION STATEMENT**

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

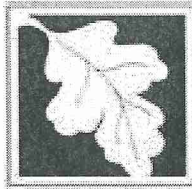
BWSC 108

Release Tracking Number

3 - 2524

B. THIS FORM IS BEING USED TO (cont.): (check all that apply)

- ☐ 14. Submit a **Revised Phase IV Completion Statement**, pursuant to 310 CMR 40.0878 and 40.0879.
- ☐ 15. Submit a **Phase V Status Report**, pursuant to 310 CMR 40.0892.
- ☐ 16. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP.)
- a. Type of Report: (check one) ☐ i. Initial Report ☐ ii. Interim Report ☐ iii. Final Report
- b. Frequency of Submittal: (check all that apply)
- ☐ i. A Remedial Monitoring Report(s) submitted monthly to address an Imminent Hazard.
- ☐ ii. A Remedial Monitoring Report(s) submitted monthly to address a Condition of Substantial Release Migration.
- ☐ iii. A Remedial Monitoring Report(s) submitted every six months, concurrent with a Status Report.
- ☐ iv. A Remedial Monitoring Report(s) submitted annually, concurrent with a Status Report.
- c. Status of Site: (check one) ☐ i. Phase IV ☐ ii. Phase V ☐ iii. Remedy Operation Status ☐ iv. Temporary Solution
- d. Number of Remedial Systems and/or Monitoring Programs: _____
- A separate BWSC108A, CRA Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.
- ☐ 17. Submit a **Remedy Operation Status**, pursuant to 310 CMR 40.0893.
- ☐ 18. Submit a **Status Report to maintain a Remedy Operation Status**, pursuant to 310 CMR 40.0893(2).
- ☐ 19. Submit a **Transfer and/or a Modification of Persons Maintaining a Remedy Operation Status (ROS)**, pursuant to 310 CMR 40.0893(5) (check one, or both, if applicable).
- ☐ a. Submit a Transfer of Persons Maintaining an ROS (the transferee should be the person listed in Section D, "Person Undertaking Response Actions").
- ☐ b. Submit a Modification of Persons Maintaining an ROS (the primary representative should be the person listed in Section D, "Person Undertaking Response Actions").
- c. Number of Persons Maintaining an ROS not including the primary representative: _____
- ☐ 20. Submit a **Termination of a Remedy Operation Status**, pursuant to 310 CMR 40.0893(6). (check one)
- ☐ a. Submit a notice indicating ROS performance standards have not been met. A plan and timetable pursuant to 310 CMR 40.0893(6) (b) for resuming the ROS are attached.
- ☐ b. Submit a notice of Termination of ROS.
- ☐ 21. Submit a **Phase V Completion Statement**, pursuant to 310 CMR 40.0894.
- Specify the outcome of Phase V activities: (check one)
- ☐ a. The requirements of a Permanent Solution have been met. A completed Permanent Solution Statement and Report (BWSC104) will be submitted to DEP.
- ☐ b. The requirements for a Temporary Solution have been met. A completed Temporary Solution Statement and Report (BWSC104) will be submitted to DEP.
- ☐ 22. Submit a **Revised Phase V Completion Statement**, pursuant to 310 CMR 40.0894.
- ☐ 23. Submit a **Temporary Solution Status Report**, pursuant to 310 CMR 40.0898.
- ☐ 24. Submit a **Plan for the Application of Remedial Additives** near a sensitive receptor, pursuant to 310 CMR 40.0046(3).
- a. Status of Site: (check one)
- ☐ i. Phase IV ☐ ii. Phase V ☐ iii. Remedy Operation Status ☐ iv. Temporary Solution



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

**COMPREHENSIVE RESPONSE ACTION TRANSMITTAL
FORM & PHASE I COMPLETION STATEMENT**

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

BWSC 108

Release Tracking Number

3 - 2524

C. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B indicates that a *Phase I, Phase II, Phase III, Phase IV or Phase V Completion Statement and/or a Termination of a Remedy Operation Status is being submitted*, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B indicates that a *Phase II Scope of Work or a Phase IV Remedy Implementation Plan is being submitted*, the response action (s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B indicates that an *As-Built Construction Report, a Remedy Operation Status, a Phase IV, Phase V or Temporary Solution Status Report, a Status Report to Maintain a Remedy Operation Status, a Transfer or Modification of Persons Maintaining a Remedy Operation Status and/or a Remedial Monitoring Report is being submitted*, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP#: 8188

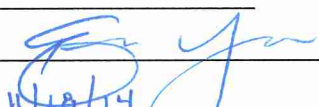
2. First Name: JARROD P

3. Last Name: YODER

4. Telephone: 978-557-8150

5. Ext.: _____

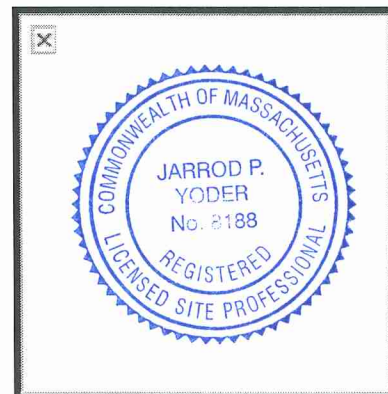
6. Email: jyoder@woodardcurran.com

7. Signature: 

8. Date: 11/18/14

(mm/dd/yyyy)

9. LSP Stamp:





Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 108

**COMPREHENSIVE RESPONSE ACTION TRANSMITTAL
FORM & PHASE I COMPLETION STATEMENT**

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

Release Tracking Number

3 - 2524

D. PERSON UNDERTAKING RESPONSE ACTIONS:

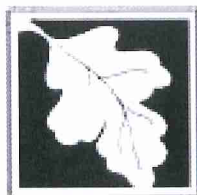
1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions
2. Name of Organization: CITY OF QUINCY PLANNING DEPARTMENT
3. Contact First Name: ROBERT A 4. Last Name: STEVENS
5. Street: 1305 HANCOCK ST 6. Title: PROJECT COORDINATOR / URBAN PLANNER
7. City/Town: QUINCY 8. State: MA 9. ZIP Code: 021690000
10. Telephone: 617-212-6135 11. Ext: 12. Email: rstevens@quincyma.gov

E. RELATIONSHIP TO SITE OF PERSON UNDERTAKING RESPONSE ACTIONS: ☐ Check here to change relationship

- ☐ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter
- ☐ e. Other RP or PRP Specify:
- ☒ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)
- ☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))
- ☐ 4. Any Other Person Undertaking Response Actions Specify Relationship:

F. REQUIRED ATTACHMENT AND SUBMITTALS:

- ☐ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.
- ☒ 2. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the submittal of any Phase Reports to DEP.
- ☐ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the availability of a Phase III Remedial Action Plan.
- ☐ 4. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of the availability of a Phase IV Remedy Implementation Plan.
- ☐ 5. Check here to certify that the Chief Municipal Officer and the Local Board of Health have been notified of any field work involving the implementation of a Phase IV Remedial Action.
- ☐ 6. If submitting a Transfer of a Remedy Operation Status (as per 310 CMR 40.0893(5)), check here to certify that a statement detailing the compliance history for the person making this submittal (transferee) is attached.
- ☐ 7. If submitting a Modification of a Remedy Operation Status (as per 310 CMR 40.0893(5)), check here to certify that a statement detailing the compliance history for each new person making this submittal is attached.
- ☐ 8. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to: BWSC.eDEP@state.ma.us.
- ☒ 9. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC 108

**COMPREHENSIVE RESPONSE ACTION TRANSMITTAL
FORM & PHASE I COMPLETION STATEMENT**

Pursuant to 310 CMR 40.0484 (Subpart D) and 40.0800 (Subpart H)

Release Tracking Number

3 - 2524

G. CERTIFICATION OF PERSON UNDERTAKING RESPONSE ACTIONS:

I, Robert Stevens, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

>if Section B indicates that this is a **Modification of a Remedy Operation Status (ROS)**, I attest under the pains and penalties of perjury that I am fully authorized to act on behalf of all persons performing response actions under the ROS as stated in 310 CMR 40.0893(5)(d) to receive oral and written correspondence from MassDEP with respect to performance of response actions under the ROS, and to receive a statement of fee amount as per 4.03(3).

I understand that any material received by the Primary Representative from MassDEP shall be deemed received by all the persons performing response actions under the ROS, and I am aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate or incomplete information.

2. By: Robert A. Stevens 3. Title: PROJECT COORDINATOR / URBAN PLANNER
Signature

4. For: CITY OF QUINCY PLANNING DEPARTMENT 5. Date: 11/12/2014
(Name of person or entity recorded in Section D) (mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section D.

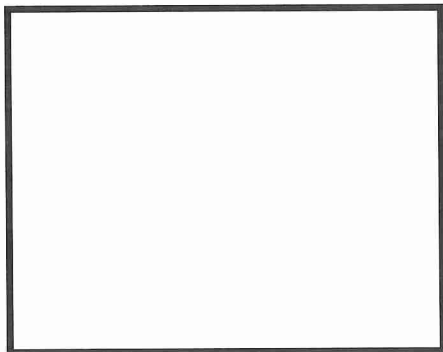
7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. Email: _____

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)





**PHASE II
COMPREHENSIVE
SITE
ASSESSMENT
REPORT**

**175 & 189 INTERVALE
STREET
QUINCY,
MASSACHUSETTS**

**MASSDEP
RTN 3-2524**

woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS

**226332
City of Quincy**

October 2014

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Figure 8	Conceptual Site Model

APPENDICES

Appendix A	Public Notification Documentation
Appendix B	Phase 1 Site Assessment Map
Appendix C	Analytical Laboratory Reports and Data Validation Summaries
Appendix D	Boring Logs

1. INTRODUCTION

At the request of the City of Quincy, Massachusetts (the City), Woodard & Curran prepared this Phase II Comprehensive Site Assessment (CSA) Report (hereto referred to as “this Report”) to summarize existing environmental conditions at the property located at 175 & 189 Intervale Street, including the “paper street” (herein referred to as the Property), in Quincy, Massachusetts. The objectives of this Phase II CSA were to collect, develop, and evaluate the information necessary to define and evaluate (1) the source, nature, extent, and potential impacts of the release of oil and/or hazardous material (OHM); (2) the risk of harm posed by the disposal site to human health, safety, public welfare, and the environment; and (3) the need to conduct remedial actions at the Property in accordance with the Massachusetts Contingency Plan (MCP).

The Property was historically used as a metal scrapping and auto salvage yard since the 1940's. Multiple releases have been identified at the Property but were initially reported to the Massachusetts Department of Environmental Protection (MassDEP) after a fire associated with a petroleum drum occurred inside the building. MassDEP assigned Release Tracking Number (RTN) 3-2524 for the release associated with the petroleum drum. The release associated with RTN 3-2524 was previously classified as a default Tier 1D disposal site indicating that the responsible party (PDM Metals, Inc.) failed to provide the required MCP submittals to MassDEP by the specified deadlines. MassDEP sent a notice of non-compliance to the potentially responsible party (PRP), Henry P. Gregoire, the former Property owner, in January 2008, informing him of the required actions as well as potential legal and monetary ramifications if regulatory compliance was not achieved. However, no remedial actions were completed by the PRP following the issuance of the RTN.

In 2009, the property was seized by the City via tax foreclosure. The City acquired the Property due to non-payment of taxes, and meets all the requirements of M.G.L. 21E, Section 2 for an exempt municipality. As an exempt municipality, the City is voluntarily working to achieve a Temporary or Permanent Solution for the releases at the Property in compliance with the MCP. The City is the current property owner and has voluntarily initiated response actions using the Massachusetts Brownfields Program.

This report was submitted electronically via eDEP using Bureau of Waste Site Cleanup (BWSC) form BWSC-108. The City municipal officials and other property owners within the disposal site boundary were notified of this submittal as required by the public notification provisions of the MCP. Copies of notification letters are included in Appendix A.

2. BACKGROUND

2.1 SITE LOCATION AND DESCRIPTION

The releases of OHM at the Property were located at 175 & 189 Intervale Street in Quincy, Massachusetts. The parcels are identified on the City's Assessor's Online Database as Map 3098 Block 20 Lot 25 and Map 3098 Block 25 Lot 27 respectively. The Property includes the portion of Intervale Street abutting the parcels to the east, which is currently not in use and is described as "paper street" in the property descriptions and records. The Property is comprised of approximately 37,500 square feet (0.86 acres).

The Property is located at 4,677,686 meters North and 333,744 meters East according to NAD83 Universal Transverse Mercator (UTM), which is also expressed as 42° 14' 7" North latitude and -71° 0' 53" East longitude. Figure 1 provides a Site Locus Map, depicting the site location with 500-foot and 0.5-mile radii around it. Figure 2-1 and 2-2 provide the Site Plan, which includes details on the Site.

2.2 PROPERTY AND SURROUNDING LAND USE

The Property was historically improved with a 1-story metal-sided warehouse-style building (constructed in 1943), a concrete structure that contained an aboveground storage tank, and a concrete, masonry unit (CMU) constructed building between 1969 and 1978. Major Property improvements were demolished in August/September 2013 and the Property is presently unpaved, vacant, and secured by a perimeter chain-link fence. A concrete wall remains at the southern extent of the Property traversing generally east to west across two-thirds of the Property. The Property was serviced by public water but was not connected to the public sewer system. A cess pool was identified in municipal records and was formerly located in the vicinity of monitoring well MW-3R. An unknown, underground structure was identified inside of the former building near the southeastern wall and was approximately 10 feet deep. This structure was later determined to be a former lift. A scale was also located on the exterior wall of the building near the gated entrance to the Property.

The Property was historically used as a metal scrapping and auto salvage yard since the 1940's. Based on information provided in historical reports, the former main building was utilized for two separate operations. The southern portion of the former building was used to remove vehicle tires from their rims and the tires were subsequently stored on site. In the northern portion of the former building, tar-like paint was applied to manhole covers as part of a recoating process. PDM Metals, Inc. (PDM, the former property owner) also reportedly "cut and scrapped" old electrical transformers inside and outside of the former building.

The Property is located at the dead end of a public way within a commercially and residentially developed area of Quincy. Abutting the Property to the north and northwest are landscaping business (Groleau's Landscape Contractors; 40 Vernon Street and TLC Supply, Inc.; 36 Vernon Street) which have occupied buildings within 30-feet of the Property. Beyond those properties are additional commercial areas. Immediately east, northeast, south, and west are parking lots associated with the Crown Colony Office Park. Residences are located within 500 feet of the Property to the northwest, north, and northeast. A daycare is located approximately 700 feet west-southwest of the Property.

No institutions (hospitals, health care facilities, orphanages, nursing homes, convalescent homes, educational facilities, or correctional facilities that provide in part or in whole overnight housing) were identified within 500 feet of the Property during site reconnaissance activities. However, it was noted that various private medical practices are housed in the Crown Colony Office Park buildings located approximately 40 feet and 150 feet from the southern extent of the Property. Neither of which are known to provide overnight housing.

Abutting properties are depicted on the Site Plan provided as Figure 2-1 and 2-2.

2.3 ENVIRONMENTAL SETTING AND NATURAL RESOURCES

According to the Massachusetts Geographical Information System, the Property is not located within 500 feet of a Protected Open Space, a Zone II groundwater resource area, a Medium- or High-Yield Potentially Productive Aquifer, an Interim Wellhead Protection Area (IWPA), or a Surface Water Supply Zone A. There are no public or private wells located on the Property or within 500 feet of the Property. Areas of Critical Environmental Concern (ACECs), Sole Source Aquifers, or Natural Heritage & Endangered Species Program (NHESP) Habitats, Certified Vernal Pools are not located within 500 feet of the Property. The closest environmental receptor is a small wetland complex and man-made stormwater sedimentation basin located approximately 300 feet to the south of the Property. The Town Brook and related wetlands are located approximately 0.25 miles east of the Property and Town River Bay (Atlantic Ocean) is located approximately 1.8 miles northeast of the Property. The MassDEP Phase 1 Site Assessment Map is included as Appendix B.

2.4 ON-SITE WORKERS AND RESIDENTIAL POPULATION

The Property is located at the end of a dead-end road on Intervale Street and is protected from trespassers by a locked chain-link fence. The Property is currently vacant and the former building structures were demolished in August/September 2013. As such, there are no permanent on-site workers or residential populations located within the boundaries of the Property and access to the area is restricted.

Based on the 2010 Census data from the United States Census Bureau, the residential population within a 0.5-mile radius of the Property is conservatively estimated to be 5,300 (United States Census Bureau, 2010).

2.5 RELEASE HISTORY

Information available from the MassDEP's Waste Site/Reportable Releases Lookup database (<http://db.state.ma.us/dep/cleanup/sites/search.asp>) was used to identify releases at the Property. This database search was supplemented with publicly available environmental database information compiled by Environmental Data Resources, Inc. for the Phase I ISI (EDR, 2013). Reviews of these sources indicated that only one RTN has been assigned to the releases at the Property. A summary of the regulatory history of this release is detailed below.

On March 12, 1986, at approximately 5:00 p.m., the Quincy Fire Department responded to a fire involving a 55-gallon drum at the Property. During the initial attempt to control the fire with water, the contents of the drum were released to the environment. A foam truck was later brought in to extinguish the flames. The Quincy Fire Department notified MassDEP of the incident. On March 13, 1986, David Chapman, a Senior Sanitary Engineer with MassDEP (formerly DEQE), investigated the release. Mr. Chapman noted that the unmarked 55-gallon drum that caught fire had a solvent odor. Following the incident investigation, it was reportedly determined that hazardous materials, specifically waste oil and waste solvent, may have been stored improperly on the Property and that the soil and/or groundwater may be contaminated with OHM. The majority of containers observed on the Property were suspected to contain materials associated with the daily operations being conducted at the Property.

In April 1989, on behalf of the former site owner, Henry Gregoire of PDM Metals, Consulting Engineers and Environmental Scientists, Inc. (CEES) completed an ASTM Phase I/II ESA to evaluate whether the materials stored at the Property have resulted in conditions, which would constitute a disposal site, and if further remedial response actions were necessary. CEES completed a subsurface investigation, including the collection of soil and groundwater samples for laboratory analysis. Based on information gathered during the Phase I and Phase II activities, CEES concluded that OHM constituents were present in soil and groundwater at the Property. Surficial soils on the Property were reportedly impacted from the continued and prolonged mishandling of hazardous materials during daily operations. CEES recommended that all storage and scraping of automobiles be ceased and that the MassDEP be notified of the conditions at the Property.

MassDEP was notified of a Potential Release or Threat of Release on July 14, 1989. MassDEP officially assigned Release Tracking Number 3-2524 to the Property in 1989, with a Release Notification date of October 15, 1989. The

entire release history of the Site is unknown as there were most likely additional unreported releases related to daily operations which occurred prior to and following the RTN assignment.

The Property is listed in an EDR database report as a Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) site. This designation is reserved for sites that are either proposed to be or are on the National Priorities List (NPL). Based on the results of the USEPA investigation described in Section 4.2, the Property was not placed on the NPL. The Property is also identified in the EDR database report as a state hazardous waste release site (SHWS database).

2.6 OTHER RELEASE TRACKING NUMBERS

During Phase II CSA activities, soil samples were collected from off-Property locations to better define the nature and extent of impacts from historical PDM, Inc. activities. Two off-property locations (40 Vernon Street and 500 Congress Street) were approached by the City to collect samples under the Massachusetts Brownfields program. Off-Property samples were warranted based upon elevated concentrations of PCBs and metals along the Property fence line. 120-day reporting conditions were identified at 40 Vernon Street and 500 Congress Street, during soil sampling activities completed in November 2013 and May 2014, respectively. The MassDEP was notified of the 120-day reporting conditions on May 20, 2014 (40 Vernon Street; RTN 3-32188) and September 18, 2014 (500 Congress Street; RTN 3-32443). During soil sampling activities in July 2014, an Imminent Hazard (IH) condition was identified on the 500 Congress Street property. The Trustees of the Medical Office Condominiums reported the IH condition to MassDEP on September 24, 2014 and MassDEP issued RTN 3-32452. The Trustees hired GZA to respond to the IH condition, which consisted of installing a temporary fence and plastic cover around the impacted area.

3. PROPERTY HISTORY

3.1 OWNER/OPERATOR HISTORY

Based upon historical records obtained and reviewed during the completion of the Phase I ISI, Henry P. Gregoire, a trustee of the Gregoire Family Trust, purchased the property on June 1, 1971. Henry P. Gregoire operated PDM Metals, Inc. at the Intervale properties and was the Property owner at the time of the documented releases associated with RTN 3-2524. The Property has been zoned for industrial use since 1943. Municipal files pertaining to the “junkyard” activities were dated as recent as January 9, 1997. However, it is uncertain when salvaging and scrapping operations ceased at the Site. As of 1995, Henry Gregoire owed the city approximately \$662,000 in unpaid taxes dating back to 1988. The property was subsequently seized by the City via tax foreclosure in 2009 and the City is the current property owner.

3.2 PETROLEUM USE HISTORY

The Property was historically used for auto salvage, metal scrapping and recoating manholes with a tar-like paint. Waste oil and/or other petroleum constituents were presumed to be generated during daily activities. Evidence of such was noted on May 29, 2012, when representatives from MassDEP conducted a reconnaissance of the Property. During the reconnaissance activities, various types of OHM were observed including 55-gallon drums with unknown contents, multiple above-ground storage tanks (AST), which did not appear to be properly decommissioned, empty propane tanks, and containers with tar sealant. In response to the conditions at the Property, the United States Environmental Protection Agency’s (USEPA) Superfund Technical Assessment Response Team (START) completed a Removal Program Site Investigation in July 2012.

Investigation activities included the documentation of the quantity and extent of potential hazardous materials. START personnel noted two 55-gallon drums, four 30-gallon drums, approximately 18, 5-gallon containers, approximately 50 gas cylinders and two ASTs. The majority of containers were suspected to contain grease, waste oil, or tar. Additional drums, gas cans, and 5-gallon motor oil containers were also noted in the former building. During the initial reconnaissance, several areas of stained soil were observed along the northwestern perimeter of the Property. Dead trees and stressed vegetation were also noted in this general area. Following initial activities, the two 55-gallon drums were screened with the PID and sampled for OHM. It was determined that one drum contained used antifreeze and the other drum contained used motor oil.

Between December 20, 2012 and January 31, 2013, OHM and miscellaneous containers were collected and removed from the Property by New England Disposal Technologies, Inc. (NEDT). These materials were located throughout the Property on the ground surface and inside of the former derelict building. OHM identified during these activities included waste oils, lead-acid batteries, tar-like material, flammable aerosols, propane, petroleum-based grease, and universal wastes (e.g., computers, monitors, etc.).

Additionally, in early July 2013, Woodard & Curran identified an additional approximately 4,000-gallon AST that was partially full with No.2 fuel oil. This AST was likely used to contain fuel oil for the purpose of heating the former building. Prior to decommissioning the AST, approximately 500 gallons of No.2 fuel oil was removed from the tank (485 gallons removed via vactor truck and approximately 30 gallons of oil sludge containerized in a 55-gallon drum) and the oil and sludge was transported to Cyn Oil Corporation of Stoughton, Massachusetts for disposal. Upon completion, the AST was inspected by the Quincy Fire Department, and the tank was approved for removal and recycling by the demolition contractor.

The history of petroleum use on site was determined based on observed site conditions and historic accounts of site activities based upon discussions with neighbors. The exact details of historic petroleum use on site is not known. Currently, ASTs, underground storage tanks (USTs), and other small containers of gasoline, heating oil, and/or diesel fuel are not present at the Property.

3.3 COMPLIANCE HISTORY

Following the completion of the ASTM Phase I/II ESA of 1989, CEES completed an MCP Waiver Application Form on behalf of the former Property owner, Henry Gregoire. The waiver would allow an environmental consultant to proceed with corrective activities without obtaining expressed or written consent from MassDEP at every phase of the remedial process. MassDEP received the Waiver Application on September 19, 1989 and John Fitzgerald, the former MassDEP Section Chief, approved the form on January 25, 1990. However, it is unclear what actions were taken by the Potentially Responsible Parties (PRP).

After a prolonged period of inactivity, on January 10, 2008, the MassDEP issued a letter entitled “Important Notice” to inform the PRP that work was needed to comply with the MCP. According to the letter, the initial step for the environmental assessment of the Property, Tier Classification, had not been completed as required. The letter provided the opportunity to re-establish compliance by performing the required Tier Classification by June 30, 2008. However, no remedial actions were completed by the former Property owner.

Since the City assumed control of the Property in 2009, the City has worked with MassDEP and USEPA to evaluate conditions at the Property and install a fence to prevent access to the Property. In December 2012, Woodard & Curran coordinated the assessment and removal of surface hazardous materials from the Property. In 2013, Woodard & Curran coordinated a building materials evaluation, observed the demolition of the building and management of building materials, coordinated Release Abatement Measures (RAM) for the excavation and off-site disposal of polychlorinated biphenyl (PCB)-impacted soils and concrete foundation materials, and collected surficial soil samples. On November 27, 2013, Woodard & Curran submitted a Phase I Initial Site Investigation and Tier II classification for the releases at the Property.

3.4 AREAS OF INTEREST

To effectively and efficiently characterize releases at the Property during Phase II CSA activities, Woodard & Curran designated three Areas of Interest (AOIs) based on historical uses of the Property as determined by aerial photographs and interviews with abutting property owners, the presence of storage tanks, and visual indications such as stained soils (AOI is not a regulatory classification or identification). The AOIs are depicted on Figures 2-1 and 2-2 and are summarized as follows:

- Sump Source Area (AOI #1) – This AOI centered around the former sump source area identified below the former building and that subject to RAM activities conducted in 2013. As described above, historic activities were conducted within the former building in the vicinity of the sump area.
- Central Yard Area (AOI #2) – Based upon historical aerial photographs, discussions with abutting property owners, and visual reconnaissance activities, this area was designated because of the storage of hazardous materials, stained surface materials identified in aerial photographs, and proximity to the fire that occurred 1986.
- Southern Yard Area (AOI #3) – Based upon historical aerial photographs, discussions with abutting property owners, visual reconnaissance activities, and hazardous waste removal operations in December 2012 and January 2013, hazardous materials were stored in ASTs and transformers were cut and scrapped in this area. Surficial stained soils were also observed in historical aerial photographs.

The locations of the three AOIs are further supported by the characterization data collected to date from shallow and subsurface soils across the Property; however, it is important to note, that impacts to soils have been identified outside the limits of the AOIs as shown on the site plan. The presence of impacts beyond the limits of the AOIs is indicative of the spread of constituents of potential concern (COPCs) across the Property from previous site operations as well as the presence of historical fill materials across the Property.

4. PREVIOUS INVESTIGATIONS AND REMEDIATION ACTIVITIES

Previous subsurface investigations, which were completed at the Property in 1989, July 2012 and April 2013 by previous consultants, USEPA and MassDEP, are documented in detail in the Phase I ISI submitted by Woodard & Curran on November 27, 2013. The investigations were completed to assess soil and groundwater conditions at the Property following the notification of the release associated with RTN 3-2524. The investigations included the completion of soil borings and the installation of groundwater monitoring wells.

4.1 INVESTIGATION COMPLETED BY CEES (1989)

As documented in files maintained in MassDEP's Waste Site/Reportable Releases Lookup database, CEES performed an ASTM Phase I ESA and limited subsurface investigation at the Property from April 10 to April 24, 1989. The assessment was conducted to evaluate whether the materials stored and historical operations at the Property have resulted in conditions, which would constitute a disposal site, and if further remedial response actions were necessary.

To evaluate subsurface conditions, CEES installed four groundwater monitoring wells (MW-1 through MW-4). During well installation, soils were visually characterized and screened with an HNU photoionization detector with a benzene calibration factor. The maximum soil headspace reading was 23 parts per million (ppm) from an interval of approximately 5 to 6 feet below ground surface (bgs) at location MW-2, located near the northwestern perimeter of the Property. Composite soil samples were collected from two of the four monitoring well locations. Soil samples were analyzed for Total Petroleum Hydrocarbons (TPH) and Polychlorinated Biphenyls (PCBs). The maximum TPH value detected was 23,000 milligrams per kilogram (mg/Kg) and the maximum PCB detection was 2 mg/Kg. However, boring logs and lab reports indicate that samples were composited over large intervals and between locations. This historic soil data is therefore not considered representative of conditions in an identifiable location, and will not be used for the objectives of this CSA.

Groundwater samples were collected from monitoring wells MW-1 through MW-4 and analyzed for volatile organic compounds (VOCs). Due to the fact that the samples were collected and analyzed over 25 years ago, groundwater data from the CEES investigation is not considered representative of current conditions and will not be used for the objectives of this CSA. A copy of the Site Report Relative to Hazardous Material (May 1, 2009 by CEES) was included in the Phase I ISI report submitted in November 2013. Groundwater analytical data collected by CEES are included in data tables presented in Section 5.4 to allow data comparison across time.

4.2 INVESTIGATION COMPLETED BY USEPA (2012)

On May 29, 2012, representatives from MassDEP conducted a reconnaissance of the Property. During reconnaissance activities, various types of OHM were observed including 55-gallon drums with unknown contents, multiple ASTs, which did not appear to be properly decommissioned, empty propane tanks, and containers with tar sealant. In response to the conditions noted at the Property by MassDEP, USEPA's START Team completed a Removal Program Site Investigation.

On July 5, 2012, START personnel collected surficial soil samples (0-3 inches) from ten locations. Each soil sample, including one field duplicate, was submitted to the USEPA Office of Environmental Measurement and Evaluation to be analyzed for PCBs and total metals. Two PCB Aroclors were detected. Aroclor-1254 was detected at a maximum concentration of 6 mg/Kg and Aroclor-1260 was detected at a maximum value of 4.9 mg/Kg. Four sample locations resulted in PCBs exceeding the MCP Method 1 Risk Characterization standard. Sampling results also indicated the presence of 18 different metals at concentrations greater than the laboratory reporting limits. Seven of the 18 metals (arsenic, barium, cadmium, chromium, lead, nickel, and zinc) were detected in surficial soil samples above their respective MCP Method 1 Risk Characterization standards.

Sampling locations are depicted on Figure 2-1 and the analytical laboratory results are included in data tables presented in Section 5.2. A copy of the Removal Program Preliminary Assessment/Site Investigation Report (July 5, 2012 by Weston Solutions, Inc.) was included in the Phase I ISI report submitted in November 2013.

4.3 INVESTIGATION COMPLETED BY WATERMARK (APRIL 2013)

On April 11, 2013, supplemental subsurface investigations were completed by Watermark under the direction of MassDEP. Four replacement monitoring wells (MW-1R through MW-4R) were installed to a depth of approximately 14-16 feet bgs because monitoring wells installed by CEES in 1989 could not be located in 2012 during the Removal Program Site Investigation and were assumed to be destroyed under unknown circumstances. The 2-inch diameter replacement monitoring wells were installed using a Geoprobe with direct push technology and soil samples were collected with 4-foot acetate sleeves. Soil obtained in the sleeves was characterized and screened with a PID via jar headspace methods. PID screening values ranged from 0.2 ppm to 42.8 ppm. The maximum PID reading was collected at an approximate interval of 4 to 5 feet bgs at location MW-4R located near AOI #3.

Replacement groundwater monitoring wells were completed with 2-inch, schedule 40 PVC with a screen slot size of 0.01-inch and solid riser pipe near the surface. A sand pack was placed in the annular space between the borehole and the well to a height of two feet above the screen. A one-foot thick bentonite seal was placed above the sand pack and sand was extended to the surface. These wells were completed with flush-mounted road boxes. Following installation, wells were developed using a peristaltic pump to improve the connection of the wells with the aquifer and remove fine sediments that accumulated in the well during installation.

Groundwater samples were collected on April 23, 2013 from the four replacement monitoring wells and analyzed for VOCs via USEPA Method 8260, extractable petroleum and volatile petroleum hydrocarbons (EPH and VPH) via MassDEP Methods, and dissolved Compendium of Analytical Methods (CAM) metals. Groundwater laboratory results are included in data tables presented in Section 5.4. A copy of the Limited Soil and Groundwater Assessment Report prepared by Watermark was included in the Phase 1 ISI report submitted in November 2013.

4.4 SUMMARY OF RAM ACTIVITIES

On August 20, 2013, demolition activities commenced to remove the vacant building at the Property. During demolition activities, Woodard & Curran identified structures below and adjacent to the former building. These structures were later identified as a cess pool, a lift, and a scale. The cess pool was reportedly a gravel trench that was connected via piping from the building. These structures were removed (except for the gravel trench part of the cess pool) during demolition activities and adverse impacts to surrounding soils were not identified through visual observations or subsequent soil analytical testing as part of the site wide investigation. However, apparent petroleum impacts were identified on and around a former sump near the northern wall of the former building (AOI #1). Upon removal of the foundation surrounding the sump, a small area of oil-impacted soil and a small portion of the building foundation was identified as petroleum impacted as well. To evaluate the area, Woodard & Curran collected a soil sample for disposal parameters including EPH via MassDEP Methods and PCBs via USEPA Method 8082. Analytical results indicated that elevated concentrations of PCBs (greater than 50 mg/kg) were identified in the soil sample.

Following the receipt and evaluation of the analytical results, the decision was made by the City to manage all excavated soils as ≥ 50 mg/kg PCB remediation wastes following the procedures set forth in 40 CFR 761.61(b) Performance-Based Disposal, Subpart O – Verification Sampling, and 40 CFR 761.79 Decontamination. A RAM Plan dated August 30, 2013 was subsequently submitted with the objective of properly managing the petroleum and PCB-impacted soil and a small portion of the building foundation to facilitate the building demolition and in preparation for Phase II CSA activities. The RAM Plan was also submitted with the secondary objective of reducing the liability posed by leaving the building materials and soil in place until a PCB Remediation plan and/or Phase IV Remedy Implementation Plan can be prepared and approved by the appropriate regulatory authority.

On September 3, 2013, soil was excavated to an approximate depth of 7 feet bgs and stored in a lined roll-off container. Based upon visual examination of the soil at depths greater than 7 feet bgs, it was determined by Woodard & Curran that continued excavation was not feasible under the current RAM Plan. Ten post-excavation verification samples, including one duplicate sample, were collected from the sidewalls (~3 feet bgs) and bottom (~ 7 feet bgs) of the excavated area. Samples were headspace screened with a PID equipped with an 11.7 eV lamp and a benzene correction factor. Samples were submitted under chain of custody to Test America Laboratories (Test America) of Westfield, Massachusetts for PCB analyses via USEPA Method 8082 using the soxhlet extraction procedure. Analytical results indicated that the lateral and vertical extents of the PCB and oil-impacted soil were not reached during RAM activities. Sidewall sample results for total PCBs ranged from 1.53 mg/kg to 25.3 mg/kg, with the maximum result collected from location WCSS-2 at the northern sidewall. Sample WCSS-10, collected at the base of the excavated area, which is approximately 3 feet below the surrounding ground surface (for a total of 7 feet bgs), had a resulting total PCB value of 92.2 mg/kg. Post-excavation verification sampling analytical data are summarized on Tables 1-1 and 1-2. The location of the RAM excavation area and the verification samples are depicted on Figure 3.

Soil samples were collected from the excavated soil inside of the roll-off container for disposal characterization. Results indicated elevated concentrations of lead and elevated reporting limits for pesticides (chlordane and hexachlorobenzene). According to the laboratory, the pesticide sample could not be reanalyzed to achieve a lower reporting limit to meet the regulatory threshold for evaluating the need to run a Toxic Characteristic Leaching Procedure (TCLP). Therefore, the TCLP procedure was used to evaluate whether the lead and pesticides (even though the pesticide concentrations were below laboratory reporting limits) would be identified as a characteristic (D-listed) waste. The results of the TCLP analyses indicated that lead (22 milligrams per liter; mg/L) and chlordane (0.05 mg/L) failed the analysis and would be considered a RCRA Characteristic Waste in addition to being identified as a TSCA PCB Remediation Waste.

The RAM was modified on October 23, 2013 to include a stabilization/chemical fixation pilot test. Excavated materials were stabilized with a mixture of Portland cement and water based on the ratio established during a bench-scale study. The mixture was applied to the soil and concrete foundation materials inside of the existing roll-off container and mixed thoroughly with an excavator. The final mixture consisted of approximately 8% Portland cement by volume. Post-stabilization verification sampling data indicated that TCLP lead and TCLP chlordane were not detected above the RCRA regulatory concentrations. The bench scale test and pilot test were described in greater detail in the RAM Plan Modification dated October 23, 2013 and the RAM Completion report dated December 24, 2013.

5. PHASE II COMPREHENSIVE SITE ASSESSMENT ACTIVITIES

This section describes investigation activities completed by Woodard & Curran between September 2013 and July 2014 in support of Phase II CSA activities. The objectives of these activities were to obtain sufficient data to delineate the nature and extent of OHM that has come to be located at the Property and to conduct an evaluation of the potential risk of harm to health, safety, public welfare, and the environment from the COPCs identified in media at the Property. These investigations combined with off property investigations completed at 500 Congress Street and 40 Vernon Street are used in support of the Conceptual Site Model (CSM) presented in Section 10 of this Report.

5.1 SUMMARY OF SOIL SAMPLING ACTIVITIES

Woodard & Curran personnel conducted soil investigation activities over four sampling events between September 2013 and July 2014. A total of 313 soil samples were collected on the Property (143 from 0 to 3 feet bgs and 170 from greater than 3 feet bgs). A total of 73 soil samples were also collected over multiple depth intervals from off property locations at 40 Vernon Street (Groleau's Landscape Contractors; 3 sample locations) and 500 Congress Street (medical office condominiums; 24 sample locations). During soil investigation activities, eleven borings were completed as groundwater monitoring wells as described in Section 5.4 below. The locations of the soil borings are depicted on Figure 2-1 and the locations of the groundwater monitoring wells are depicted on Figure 2-2.

Soils collected at each location were photographed, visually classified and screened using a PID and jar headspace methods. The PID was equipped with an 11.7 eV lamp and calibrated for a benzene correction factor. A prescriptive suite of analyses was predetermined for each sample location depending on the sampling objective (i.e. replicate historical data, delineate surficial staining, and define horizontal and vertical extent of impacts). Soil samples were analyzed for one or more of the following analyses: PCBs via USEPA Method 8082 with soxhlet extraction procedure, MCP 14 metals via MassDEP Methods, VOCs via USEPA Method 8260, VPH fractions via MassDEP Methods, EPH and target analytes via MassDEP Methods, total chromium via MassDEP Methods, and/or Hexavalent Chromium via USEPA method 7196A. VPH target analytes were not submitted for laboratory analyses because these COPCs are included on the VOC 8260 list. During the sampling events, non-disposable tools and equipment were decontaminated with a clean water rinse, detergent scrub, and a final rinse with a d-Limonene solution and wiped clean of any residual particles. Following collection, soil samples were placed on ice and transferred to the laboratory under standard chain of custody practices.

A summary of the activities completed during each event is as follows:

- **September 16, 2013** – This sampling event consisted of collecting 38 soil samples (WCSS-11 through WCSS-48) from a depth of 0 to 4 inches bgs throughout the Property. Sample locations were determined based on the results of previous investigations, aerial photographs, and field observations such as surficial staining. PID screening results ranged from below instrument detection limits to 3.4 ppm, with the majority of measurements being less than 0.5 ppm. Anthropogenic debris such as glass, plastic, porcelain, metal fragments, concrete, brick, coal, or wood were observed in surficial materials at 26 of 38 sampling locations. During this event, soil samples were not collected from within the footprint of the former building.
- **September 25 and 26, 2013** – This sampling event consisted of the advancement of eleven soil borings (WCSB-1 through WCSB-11) completed as ground water monitoring wells (WCMW-1 through WCMW-11). Technical Drilling Services (TDS) of Sterling, Massachusetts was contracted by Woodard & Curran to complete subsurface borings and install groundwater monitoring wells. Subsurface borings were completed via hollow-stem auger rig with samples collected via split spoon sampling methods. The borings were advanced to varying depths ranging from 12 to 25 feet bgs with the water table encountered at approximately 5 to 8 feet bgs. PID screening results ranged from below instrument detection limits to 73.8 ppm, with the majority of measurements being less than 1 ppm. The elevated PID readings corresponded to an interval of black stained, tar-like soils at WCSB-5.

- **November 22, 2013** – TDS was contracted to advance a total of 14 soil borings (WCSB-4, WCSB-11, WCSB-7, and WCSB-12 through WCSB-22) for additional delineation purposes. Three borings (WCSB-4, WCSB-11 and WCSB-7) were co-located with previously installed boring/monitoring well locations to help delineate the vertical extent of contamination. Five borings (WCSB-18 through WCSB-22) were advanced to delineate the lateral and vertical extent of the former sump identified during demolition activities, while the remaining borings were completed to assist in delineating the extent of impacts. Borings were completed using direct-push Geoprobe drilling techniques. The soil borings were advanced to an approximate depth of 10 feet bgs with the exception of WCSB-20, which was advanced in the center of the former sump (RAM excavation area) to an approximate depth of 20 feet bgs. Soil staining was observed to terminate at approximately 15 feet bgs where a peat layer was observed.

In addition to samples collected from the borings described above, Woodard & Curran collected 17 additional surficial soil samples (WCSS-47 (for PCBs only), WCSS-49 through WCSS-63 and WCSS-72) for delineation purposes. Surficial samples were collected with a trowel or shovel and decontaminated.

PID screening results ranged from below instrument detection limits to 16.2 ppm (WCSS-49) for shallow soils and up to 359.3 ppm (WCSB-4 at a depth of 1.0-2.0 feet bgs) for deep boring samples. The majority of the results were less than 0.5 ppm. The elevated headspace results were atypical and not analogous to conditions observed during previous investigations. Elevated PID readings did not correlate well with analytical results for samples collected at these locations (i.e., elevated VOC concentrations were not present in laboratory results).

- **May 12, 2014** – Due to reported concentrations of PCBs in shallow soils collected at the fence line between the Property and 500 Congress Street and 40 Vernon Street, the City decided to use some of the Massachusetts Brownfields Assessment grant to extend the characterization sampling program to include off-property locations. Shallow soil samples (i.e., 0 to 3 feet bgs) were collected from 15 locations (WCSS-1 through WCCS-13 and WCVS-1, WCVS-2) and deep soil samples were collected from 12 locations on 40 Vernon Street and 500 Congress Street. Borings were completed using direct-push Geoprobe drilling techniques. During this event, each boring was sampled at three intervals. The shallow soils (0-0.25'), shallow in plane with the surface of the Property depending on elevation change, and in plane with 2.5-3.0' samples at the Property. Deep boring sleeves were capped for future sampling depending on initial results. Deep sampling did not occur until July 31, 2014 for borings WCCS-1 through WCCS-7, WCCS-11 and WCCS-13.

Borings were advanced by TDS to a maximum depth of 10 feet bgs and samples were collected on a continuous basis. PID screening results ranged from below instrument detection limits to 16.2 ppm (WCCS-1 and WCCS-3 at approximately 0.5-1.0 feet bgs). The majority of the results were less than 0.5 ppm. Based on the PID readings during this event and the lack of correlation between PID screening results and laboratory analysis in previous events, PID screening results were not used to select samples for analysis. Samples were selected for analysis based on the existing data set and visual observations made during the soil boring program.

- **July 28-31, 2014** – In consultation with USEPA and MassDEP, Woodard & Curran developed a sampling plan to aid the USEPA in the Removal Action planned for the Property in 2014/2015. Woodard & Curran's sampling plan included the advancement of 92 soil borings (S-1 through S-82 (on property) and WCCS-14 through WCCS-23 (500 Congress Street)) using a track-mounted geoprobe drill rig to depths of approximately 15 feet bgs. Overall, the borings were advanced to create a 20-foot sampling grid for PCBs across the Property (82 locations) and adjacent properties (10 locations). At each boring location, soil samples were collected from representative sample intervals. The sampling intervals varied from boring to boring; however, in general samples were collected from three intervals: 0-0.25 feet bgs, 3-4 feet bgs, and 6-7 feet bgs. Sample locations located near the former sump area were collected at deeper intervals based on previous data, which indicated that PCBs were present at a depth of approximately 15 feet bgs and on

top of a peat layer. Samples were collected and submitted for PCBs via USEPA Method 8082 with Soxhlet extraction procedure (217 primary samples) and MCP 14 metals via MassDEP Methods (50 primary samples).

At each boring location, samples were collected on a continuous basis to evaluate subsurface conditions and the vertical extent of impacted media. As described above, due to the lack of correlation between PID headspace readings and analytical laboratory results from the first two sampling events, PID screening was not used to select samples for laboratory analysis.

5.2 SUMMARY OF SOIL SAMPLING ANALYTICAL RESULTS

Analytical results from the soil sampling events are summarized in the following sections based on the depth of the sample below ground surface. Analytical results are summarized on Tables 1-1 through 1-4, which presents summaries of COPCs that were detected above the laboratory reporting limits collected at the Property (0-3 feet bgs and greater than 3 feet bgs) and off-property locations (0-3 feet bgs and greater than 3 feet bgs). Table 1-1 also includes the analytical results for soil samples collected during the USEPA START assessment described in Section 4.2. Copies of the complete analytical laboratory reports are provided in Appendix C. The locations of the soil samples are provided on Figure 2-1. A summary of the total PCBs and selected metals compared to the Method 1 S-1 Risk Characterization standards are depicted on Figures 4-1 through 4-9 for shallow soils (i.e., less than 3 feet bgs) and on Figure 5-1 through 5-9 for subsurface soils (i.e., greater than 3 feet bgs). Comparison to the Method 1 S-1 Risk Characterization standards in Figures 4 and 5 are for reference only and do not consider current uses of the Property (vacant) or historical fill identified in soils ranging in depth from existing grade to approximately 6-8 feet bgs with the exception of soil sample locations WCVS-1 and WCVS-2.

5.2.1 Shallow Soil Sampling (< 3 feet bgs)

Shallow soil samples were collected from both on-Property and off-Property locations during the sampling events. Analytical results are summarized on Tables 1-1 and 1-3 and are presented on Figures 4-1 through 4-9. A summary of the analytical results for each of the main categories of analysis is as follows:

PCBs – PCBs were detected in 254 of 313 samples collected from on-Property locations. Total PCBs were reported at a maximum concentration of 2,300 mg/Kg and an average of 43.8 mg/Kg. In general, the areas of highest PCB impacts correlate to the three AOIs described in Section 3.4 with analytical results indicating that PCBs at concentrations ≥ 50 mg/Kg are limited to the AOIs as shown on Figure 4-1.

PCBs were detected in 37 of 40 samples collected from off-property locations with a maximum reported concentration of 40.6 mg/Kg and an average reported concentration of 2.71 mg/Kg. One location at the 500 Congress Street property (WCCS-13) exceeded the Imminent Hazard (IH) threshold of 10 mg/Kg in shallow soils (less than 12 inches) near residential properties. The Trustees for the Medical Condominiums implemented Immediate Response Action (IRA) activities under RTN 3-32452 as summarized in Section 2.6.

The average concentration of total PCBs at both on-Property and off-Property locations exceeded the MCP S-1 Risk Characterization standard and the EPA high occupancy use criteria, both of which are 1 mg/Kg.

Metals – Metals were detected above laboratory reporting limits in soil samples collected from various locations across the Property and from off-Property locations. While analytical results indicated that seven metals (antimony, arsenic, barium, lead, mercury, nickel, and zinc) were present in individual samples at concentrations above the applicable MCP Method 1 Risk Characterization standards, only lead and zinc were present at an average concentration exceeding the applicable MCP S-1 soil standards for either on-Property or off-Property locations. For lead, the average concentration in on-Property samples was 873 mg/Kg compared to 671 mg/Kg for off-Property locations. For zinc, the average concentration in samples collected from on-Property locations was 1,073 mg/Kg as compared to an average concentration of 1,329

mg/Kg for off-Property locations. Overall, analytical results were relatively consistent between the on-Property and off-Property locations and between soils collected from within and outside of the three AOIs.

Total chromium/hexavalent chromium samples were collected from locations intended to be co-located with historical samples where elevated concentrations were detected in samples collected by Weston in 2012. However, the total chromium data could not be reproduced from earlier sampling events. For on-Property locations, total chromium was reported at a maximum concentration of 560 mg/Kg. While the individual sample result was above the Method 1 S-1 Risk Characterization soil standard, the average concentration of total chromium was 74.1 mg/Kg and the maximum reported hexavalent chromium concentration was 5.71 mg/Kg, both of which are below the this soil standard. With the exception of analytical results from two on-Property samples collected along the western property boundary, chromium results above the Method 1 S-1 Risk Characterization standard of 100 mg/Kg were limited to within the AOIs. For soil samples collected from off-Property locations, total chromium was reported at a maximum concentration of 129 mg/Kg with an average of 27.3 mg/Kg.

EPH and VPH – Select soils samples were submitted for EPH/VPH analyses based on visual observations and the results of PID headspace screening. Analytical results from on-Property locations indicated that only dibenz(a,h)anthracene was present at an average concentration above the applicable MCP Risk Characterization standard. While other COPCs were detected at various locations and at individual concentrations above the MCP soil standards, the results were consistent with the use of fill materials throughout the area and limited impacts from petroleum releases except in the sump source area where petroleum impacts were identified at depths approaching 14 feet bgs. No other COPCs were present at an average concentration above the applicable criteria. Overall, there was no apparent correlation between the results of PID headspace screening and the analytical laboratory results.

VOCs – Select soil samples were submitted for VOC analysis based on visual observations and the results of PID headspace screening. Two COPCs were detected at an average concentration above the applicable Method 1 S-1 Risk Characterization standards; 1,4-dichlorobenzene and chlorobenzene. Analytical results indicated that other COPCs were detected in individual samples at concentrations above the MCP soil standards. Overall, there was no apparent correlation between the results of PID headspace screening and the analytical laboratory results.

5.2.2 Subsurface Soil Sampling (> 3.0 feet bgs)

Subsurface soil samples were collected from both on-Property and off-Property locations during the sampling events. Analytical results are summarized on Tables 1-2 and 1-4 and are presented on Figures 5-1 through 5-9. A summary of the analytical results for each of the main categories of analysis is as follows:

PCBs – PCBs were reported at concentrations >1 mg/Kg in 22 samples collected from 19 soil borings (14 on-Property and 5 off-Property locations). Of these 22 samples, analytical results indicated that PCBs were present at concentrations \geq 50 mg/Kg in two samples (total PCBs reported at concentrations of 92.2 and 195 mg/Kg), both of which were collected from within the AOIs described above. For off-Property samples, PCBs were reported at a maximum concentration of 18.4 mg/Kg in one sample collected from a depth of 4.5 to 5 feet bgs. Analytical results also indicated that the average reported concentration of PCBs in both on-Property samples (average concentration of 4.01 mg/Kg) and off-property samples (average concentration of 2.19 mg/Kg) exceeded the applicable Method 1 S-1 Risk Characterization standard of 1 mg/Kg. Overall, elevated PCB analytical results were detected in the three AOIs described above (particularly with regard to PCBs at concentrations \geq 50 mg/Kg). However, PCBs were reported in individual soil samples outside the AOIs above the Method 1 S-1 Risk Characterization standard indicating that the presence of PCBs in subsurface soils is not limited to the immediate vicinity of the AOIs (i.e., known source locations).

Metals – Metals were detected above laboratory reporting limits in soil samples collected from various locations across the Property and from off-Property locations. While analytical results indicated that six metals (antimony, arsenic, barium, lead, nickel, and zinc) were present in individual samples at concentrations above the applicable MCP Method 1 Risk Characterization standards, only lead and zinc were present at an average concentration exceeding the applicable S-1 soil standards for either on-Property or off-Property locations. For lead, the average concentration in on-property samples was 234 mg/Kg compared to 584 mg/Kg for off-property locations. For zinc, the average concentration in samples collected from on-Property locations was below the Method 1 S-1 Risk Characterization standard with a reported average of 854 mg/Kg while the average concentration was 1,694 mg/Kg for off-Property locations. Deep soil samples were not analyzed for hexavalent chromium due to the results from the shallow soil samples and based on the total chromium concentration.

EPH and VPH – Select on-Property subsurface soils were analyzed for EPH and VPH based on visual observations and the results of PID headspace screening results. No off-Property samples were analyzed for EPH/VPH. Analytical results indicated that individual EPH COPCs were present at concentrations above the applicable Method 1 S-1 Risk Characterization standard; however, the average concentrations for these COPCs were below the applicable standard with the exception of benzo(a)pyrene (2.16 mg/Kg) and dibenz(a,h)anthracene (0.983 mg/Kg). None of the VPH fractions detected exceeded MCP Method 1 Risk Characterization standards. Analytical results are consistent with shallow soil results.

VOCs – Select on-Property soil samples were submitted for VOC analysis based on visual observations and the results of PID headspace screening. Two COPCs, 1,4-dichlorobenzene and chlorobenzene, were detected at concentrations above the applicable MCP Method 1 S-1 Risk Characterization standards in individual samples. The average concentration for both 1,4-dichlorobenzene (2.02 mg/Kg) and chlorobenzene (8.76 mg/Kg) exceeded the applicable Method 1 S-1 Risk Characterization standards of 1 and 3 mg/Kg, respectively. As with the shallow soil sample results, there was no apparent correlation between the results of PID headspace screening and the analytical laboratory results.

5.2.3 Soil Sampling Data Summary

In general, PCBs, MCP 14 metals, and low-level EPH/VPH and VOC COPCs are located in surficial soils throughout the Property in areas characterized to contain historical fill material. The majority of the PCB and metals contamination detected in shallow soils is likely related to the historic metal scrapping, auto salvage and/or transformer cutting operations, and the presence of historical fill materials.

The subsurface soil analytical data collected to date indicates that subsurface soils are also primarily impacted by PCBs and metals associated with the three AOIs and the presence of fill materials across the Site. Low level concentrations of some EPH and VOC COPCs are also present at varying concentrations but remain in isolated areas such as the former sump area, and other AOIs identified at the Property.

Overall, analytical results are consistent with the known historic activities on the property as well as the use of historic fill materials throughout the area.

5.3 SUMMARY OF MONITORING WELL INSTALLATION ACTIVITIES

Groundwater monitoring wells were installed at each of the eleven borings advanced on September 25 and 26, 2013. Monitoring wells were identified with the same number corresponding to the boring location, WCMW-1 through WCMW-11. The wells were completed with 2-inch diameter, schedule 40 PVC with a screen slot size of 0.01-inch and solid riser pipe near the surface. A sand pack was placed in the annular space between the borehole and the well to a height of two feet above the screen. A one-foot thick bentonite seal was placed above the sand pack and sand was extended to the surface. Wells located near the Property's perimeter were completed with a steel stand pipe while the more central wells were completed with flush-mounted road boxes. Boring logs that provide monitoring well construction details are provided in Appendix D. Following installation, wells were developed on September 27,

2013 using a centrifugal pump to improve the connection of the wells with the aquifer and remove fine sediments that accumulated in the well during installation. The locations of these eleven groundwater monitoring wells and the wells installed during previous activities are provided on Figure 2-2.

5.4 SUMMARY OF GROUNDWATER SAMPLING RESULTS

Woodard & Curran completed groundwater sampling events in October 2013 and January 2014. Groundwater sampling events were also conducted by previous consultants in April 1989 and April 2013. Wells that were sampled during each event are presented below:

- April 1989: MW-1 through MW-4 (All wells destroyed under unknown circumstances).
- April 2013: MW-1R, MW-3R, MW-4R (Replacement wells installed by Watermark, April 2013).
- October 2013: MW-1R through MW-4R, WCMW-1 through WCMW-11 (WCMW wells installed by Woodard & Curran September 25-26, 2013).
- January 2014: MW-1R through MW-4R, WCMW-1 through WCMW-11.

A summary of the analytical results from the groundwater sampling events described above is provided below.

5.4.1 CEES Groundwater Sampling Event (April 1989)

Groundwater samples were collected by CEES in 1989 from four monitoring wells located at the Property as part of an initial site investigation. Groundwater samples were submitted to Groundwater Analytical of North Scituate, Massachusetts to be analyzed for VOCs and TPH. Laboratory analysis of groundwater samples resulted in detections of various solvent and/or petroleum-based COPCs. Specifically, chlorinated solvents (including TCE and PCE) and the associated breakdown products were detected in groundwater monitoring wells MW-1, MW-3, and MW-4 above current Method 1 GW-2 Risk Characterization standards. A summary of the VOC analytical results is provided on Table 4. TPH results are not included on Table 4 because this analysis is not comparable to more recent analyses (EPH/VPH) and is not currently used to characterize the nature and extent of releases at MCP sites. Groundwater data collected by CEES is more than 20 years old and is no longer representative of existing conditions at the Property. Therefore, groundwater data collected by CEES was not included in determining the nature and extent of contamination at the Property for this Phase II CSA or as part of evaluating risks at the Property.

5.4.2 Watermark Groundwater Sampling Event (April 2013)

On April 23, 2013, Watermark collected groundwater samples from three of the four replacement monitoring wells. Samples were not collected from the fourth location, MW-2R, due to budgetary restrictions. Low flow/low stress sampling techniques were used to limit the evacuation rate and drawdown in each well. Geochemical parameters, consisting of temperature, pH, specific conductivity, dissolved oxygen, turbidity, and oxidation-reduction potential (ORP) were continuously monitored using a flow-through cell. Samples were submitted under chain of custody to Con-Test Analytical Laboratory of East Longmeadow, Massachusetts. The groundwater samples were analyzed for VPH fractions only by MassDEP methods, VOCs by USEPA Method 8260, EPH and target polynuclear aromatic hydrocarbons (PAHs) by MassDEP Methods, dissolved metals by USEPA Method 6010, dissolved mercury by USEPA Method SW-846 7470A, and hexavalent chromium by USEPA Method SW-846 7196A.

Various dissolved metals, VOCs, EPH, PAHs, and VPH COPCs were detected in groundwater samples collected during this sampling event. While no building exists at the Property, potential future developments may include buildings at the Property and were therefore compared to Method 1 GW-2 and GW-3 Risk Characterization standards. Data collected by Watermark were below applicable Method 1 Risk Characterization standards for this one sampling event. Refer to Table 4 for a summary of groundwater analytical data collected by Watermark. Analytical results from this event are considered representative of current site conditions and have been summarized on Table 5 and included in the Risk Assessment as described in Section 11.

5.4.3 Woodard & Curran Groundwater Sampling Events (October 2013 and January 2014)

Prior to purging, the depth to groundwater and total depth of each monitoring well were measured to the nearest 0.01-foot using an electronic oil/water interface probe. The recorded depth to groundwater measurements were used to calculate the volume of standing water in the well. A summary of the field measurements is provided on Table 2. Groundwater was present at depths ranging from 5 to 12 feet bgs across the Property. Also prior to purging, all wells were examined for the presence of non-aqueous phase liquid (NAPL). NAPL was not observed in any of the monitoring wells in October 2013 and January 2014. Monitoring wells were purged using a peristaltic pump and dedicated tubing. Modified low flow/low stress sampling techniques were used to limit the evacuation rate and drawdown in each well. Geochemical parameters, consisting of temperature, pH, specific conductivity, dissolved oxygen and ORP were continuously monitored using a flow-through cell. Turbidity was monitored using water taken from the line prior to the flow-through cell during well purging. Due to the very silty nature of the groundwater, turbidity was also used to evaluate whether groundwater conditions stabilized prior to collecting samples. Field parameters are provided in Table 3 (including those recorded during the April 2013 sampling event conducted by Watermark).

Groundwater samples were collected from each well, as outlined above, using a peristaltic pump and dedicated tubing. Samples were collected in laboratory-supplied containers, cooled to 4°C, and submitted under chain-of-custody protocol to an appropriate laboratory facility. Samples collected by Woodard & Curran were submitted to Test America to be analyzed for VOCs via USEPA Method 8260, EPH and VPH via MassDEP methods, and dissolved MCP 14 metals via MassDEP methods. Dissolved metals samples were field filtered with a 0.45-micron filter prior to submittal. A summary of the groundwater analytical results is provided on Table 4. The complete analytical laboratory reports are provided in Appendix C.

During the October 2013 and January 2014 sampling events, nine VOC COPCs were detected. PCE and its associated breakdown products; TCE, cis-1,2-Dichloroethene (cDCE), and vinyl chloride (VC), were commonly detected in groundwater samples. Overall, individual results were reported at concentrations exceeding the MCP GW-2 standards for cDCE (WCMW-7), TCE (MW-3R, WCMW-7, WCMW-9), and VC (MW-2R, WCMW-3, WCMW-7) in the October and/or January sampling events. Individual VPH fractions were detected in the groundwater samples collected in the October and January sampling events with reported concentrations of C₅-C₈ aliphatic hydrocarbons and C₉-C₁₀ aromatic hydrocarbons but did not exceed the applicable Method 1 GW-2 or GW-3 Risk Characterization standards. Seven individual Target PAH analytes and the EPH hydrocarbon fractions were detected in various groundwater samples collected throughout the Property during the two sampling events. Target PAH COPCs associated with coal tar, such as, fluorene, naphthalene, and phenanthrene, were detected in seven wells during the October 2013 sampling event and two wells during the January 2014 sampling event. The maximum values for the aforementioned COPCs occurred at MW-4R. MW-4R also had the greatest number of EPH constituent detections. The October 2013 fluorene detection result of 43.4 ug/L at MW-4R exceeds the applicable MCP Method 1 GW-3 Risk Characterization standard of 40 ug/L. Fluorene was detected at a resulting value of 22 ug/L during the January 2014 sampling event.

Four of the MCP 14 metals (barium, chromium, nickel, and zinc) were consistently detected in groundwater samples collected throughout the site (present in samples collected from 14 or 15 reported locations). Overall, dissolved metals were mostly detected at low concentrations; however, during the January 2014 sampling event, samples collected from WCMW-6 and WCMW-8 exceeded the applicable MCP GW-3 standards for cadmium and zinc. The maximum cadmium detection occurred at WCMW-8 at a resulting concentration of 12.2 ug/L and the maximum concentration of zinc occurred at WCMW-6 with a resulting concentration of 2,200 ug/L. The applicable Method 1 GW-3 Risk Characterization standards for cadmium and zinc are 4 ug/L and 900 ug/L respectively.

During the January 2014 sampling event, the sample collected from WCMW-1 was analyzed for PCBs. Analytical results indicated that PCBs were present at a concentration of 0.154 µg/L; however, due to sediments in the sample at the time of sample collection, a second analysis was performed on a sample that was filtered using a 0.45 micron

filter to remove the sediments. Results from the filtered sample indicated that PCBs were non-detect (with a minimum laboratory reporting limit of $< 0.233 \mu\text{g/L}$ and a method detection limit of < 0.0930) indicating that the reported concentration in the unfiltered sample was due to PCBs associated with the sediment and not representative of groundwater conditions.

5.5 SURVEYING

A Professional Land Surveyor (PLS) was subcontracted to complete a horizontal location and vertical elevation survey of the monitoring wells, fence line, and select topographic attributes located at the Property on January 27, 2014. Well elevations and groundwater level measurements were used to evaluate the localized groundwater flow direction across the Property and are discussed further in Section 7.3.

6. DATA QUALITY REVIEW

This data quality and data usability assessment has been conducted to review the samples collected in support of Phase II CSA activities. Data validation and review was conducted by Woodard & Curran and a third-party validator, Data Check, Inc. of New Durham, New Hampshire. This review included a check of field documentation including sample collection and preservation methods, a check of the laboratory data and documentation, a review of the internal laboratory QA/QC procedures and results including surrogate recoveries, blank results, matrix spike (MS) and matrix spike duplicate (MSD) results, laboratory control standard (LCS) and laboratory control standard duplicate (LCSD) results, an evaluation of sample holding times, and field duplicate results. Data Check's data validation summaries are provided in Appendix C.

6.1 SOIL DATA USABILITY ASSESSMENT

A summary of the data usability assessment for the data is presented below:

- Consistent procedures and laboratory analysis of the data were achieved. Sample containers were packed on ice and delivered to the laboratory under standard chain of custody procedures.
- Some samples were received at the laboratory below the acceptable temperature range (4° Celsius +/-2°). However, the samples were not frozen and no qualifications have been applied.
- All samples were extracted, digested, and/or analyzed within allowable holding times for the applicable methods with the exception of five samples for PCBs within SDG 480-50847. Detected and non-detected PCB results for the five samples were qualified as J or UJ.
- The data packages were reviewed to ensure that all sample and associated quality assurance results were available. Results of the completeness review indicated that all collected samples were analyzed and all quality control results were available to complete the data validation process.

VOCs

- No VOC field duplicate samples were collected. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the recoveries for LCS and LCSD. No MS/MSD was performed on the data packages. LCS/LCSD recoveries and RPDs met the acceptance in the majority of samples. Some qualifications were applied to data from each of the SDGs based on either LCS/LCSD recoveries or percent differences outside the control limits.
- Accuracy of the analytical data was assessed by reviewing the surrogate recoveries. The surrogate recoveries met the acceptance criteria with the exception of toluene and 4-bromofluorobenzene surrogates in one sample in SDG-480-50847.
- All VOC method blanks were non-detect for target compounds with the exception of one method blank associated with a detection for methylene chloride above the reporting limit. Since methylene chloride was not detected in the associated samples, no qualifications were applied.
- All VOC field/trip blank samples were non-detect for target compounds with the exception of one sample which had reported detections of acetone, methylene chloride, and tetrahydrofuran above the method detection limits but below the RL. Based on these detections, the concentration of acetone in one sample was qualified as undetected at the RL.
- According to the case narrative, some samples were analyzed at dilution and some samples were analyzed or re-analyzed at medium levels due to the high concentrations of target compounds in the samples. Reporting limits for those samples were elevated as a result of the dilutions and/or analysis at medium levels.

VPH

- No VPH field duplicate samples were collected. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the recoveries for LCS and LCSD. No MS/MSD was performed on the data packages. LCS/LCSD recoveries and RPDs met the acceptance criteria. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the surrogate recoveries. All VPH surrogate recoveries met the acceptance criteria. No qualifications were applied.
- VPH method blanks were non-detect for target compounds with the exception of three method blanks in SDG 480-46783 for the following compounds: C₅-C₈ Aliphatics, C₉-C₁₂ Aliphatics, and/or naphthalene. Analytical results for the affected samples were qualified based on the reported detections. The analytical laboratory "B" flag was removed from several of the samples based on these results.
- No VPH field blank samples were submitted with the analytical samples. No qualifications were applied.
- According to the case narrative, some samples were analyzed at dilution due to the high concentration of target compounds and/or due to the sample matrix. Reporting limits in the affected samples are elevated based on the dilutions performed.

EPH

- No EPH field duplicate samples were collected. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the recoveries for LCS and LCSD. No MS/MSD was performed on the data packages. LCS/LCSD recoveries and RPDs met the acceptance criteria with the exception of naphthalene in one sample in SDG 480-44524 and SDG 480-50847. Analytical results were qualified as either J- or UJ based on these results.
- Accuracy of the analytical data was assessed by reviewing the surrogate recoveries. EPH surrogate recoveries met the acceptance criteria with the exception of results in 12 of the samples. Analytical results for the affected samples were qualified as estimated (J,J-,UJ) based on these results.
- EPH method blanks had detections for several compounds above the MDL but below the RL as described in the data validation summaries. Analytical results from the affected samples were qualified based on these results. The analytical laboratory "B" flag was removed from several of the samples based on these results.
- No EPH field blank samples were submitted with the analytical samples. No qualifications were applied.

PCBs

- All PCB surrogate recoveries met the acceptance criteria or were diluted out with the exception of those samples described in the data validation summaries. Analytical results for the affected samples were not qualified based on the dilutions or only one column result outside the acceptance criteria with the exception of 14 samples. Analytical results from the 14 samples were qualified as estimated (J-,J+,UJ) based on the surrogate recoveries as described in the data validation summaries.
- The PCB method blanks were non-detect for target compounds. Two PCB field blank samples were collected and submitted for analysis. The PCB field blank samples were non-detect for target compounds. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the recoveries for LCS and LCSD. All PCB LCS/LCSD recoveries and RPDs met the acceptance criteria. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing MS/MSD results for the data packages. The complete MS/MSD results for three of the data packages were not usable due to sample dilutions. PCB MS/MSD sample results in the remaining samples met the acceptance criteria with the exception of results

associated with three samples (240-40014-16, 240-40014-57, and 240-40080-43). Results for sample 240-40014-16 were not qualified due to the sample dilutions. All PCB results from the remaining two samples were qualified as estimated (UJ).

- A total of 20 field duplicate samples were collected during the sampling events to evaluate the precision of the analytical results. Relative percent difference (RPD) between the primary and associated duplicate samples met the acceptance criteria with the exception of the results for either Aroclor 1242, Aroclor 1254, or Aroclor 1260 in three samples. Analytical results for the applicable Aroclors in the affected samples were qualified as estimated (J) due to poor field duplicate precision.
- The RPD between sample column results for individual samples were evaluated to evaluate the precision of the results. The RPD between sample column results were evaluated and determined to be within the acceptance criteria ($\leq 25\%$) with the exception RPDs for select Aroclors in 43 samples. The applicable Aroclor results for the affected samples were qualified as estimated (J) base on this evaluation.
- Several samples were analyzed at a dilution due to the high concentration of PCBs present in the samples and/or due to the sample matrix. Reporting limits in these samples were elevated as a result of the dilutions performed.
- According the case narratives, several samples appear to contain PCBs; however, due to weathering or other environmental processes, the PCBs in the samples do not closely match any of the laboratory's Aroclor standards used for instrument calibration. The best overall pattern was used for identification and quantification. The PCB results for the affected samples have been qualified as estimated (J).
- According to the case narrative, PCB results in several samples within SDG 480-45969 appear to be a mixture of Aroclor 1254 and Aroclor 1260. The laboratory reported the results as Aroclor 1260 for the affected samples and the results have been qualified as estimated (J).

Metals

- Method blank sample results contained reported concentrations of zinc, selenium, nickel, thallium, and/or cadmium at concentrations above the MDL but below the RL. Analytical results for the majority of the affected sample were not qualified based on the sample concentrations greater than the blank action level. Analytical results for affected samples within SDG 480-45969 were qualified as undetected at the RL or estimated (J). See the data validation summaries for additional information.
- Three metals field duplicate samples were submitted with SDG 480-59783 to evaluate the precision of the analytical results. Relative percent difference (RPD) between the primary and associated duplicate samples met the acceptance criteria. No qualifications were applied to the data. No metals laboratory duplicates were analyzed for these samples. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the recoveries for LCS/ LCSD and MS/MSD. LCS/LCSD recoveries and RPDs met the acceptance criteria. No qualifications were applied. MS/MSD evaluation was performed on 15 samples for metals and on three samples specifically for mercury. MS/MSD sample results for metals did not meet the acceptance criteria in 14 of the 15 samples. Analytical results were qualified as described in the data validation summaries. MS/MSD results for the three mercury samples met acceptance criteria. No qualifications were applied.
- Some analytes in some samples were analyzed at a dilution due to the high sample concentrations and/or due to the sample matrix. Reporting limits for these analytes in the specific samples are elevated as a result of the dilutions.

Hexavalent Chromium

- No hexavalent chromium field duplicate samples were collected. No qualifications were applied.

- Accuracy of the analytical data was assessed by reviewing the recoveries for LCS/ LCSD and MS/MSD. LCS/LCSD recoveries and RPDs met the acceptance criteria. No qualifications were applied. MS/MSD met the acceptance criteria with the exception of MS results for soluble and/or insoluble results in two samples (WCSS-37 (0-0.25) and WCSS-42 (0-0.25). Analytical results were qualified as estimated (J) based on these results.
- Hexavalent chromium method blanks were non-detect. No field blank samples were submitted for hexavalent chromium analysis. No qualifications were applied.
- The hexavalent chromium laboratory duplicate met the acceptance criteria. No qualifications were applied.

Oxidation Reduction Potential and pH

- The redox and pH LCS results met the acceptance criteria. No qualifications were applied.
- The redox and pH laboratory duplicate sample results met the acceptance criteria. No qualifications were applied.
- No field duplicate samples were submitted. No qualifications were applied.

Based on this review, the data adequately represents the materials tested, and the samples are considered usable for the purposes of characterizing site soils as part of remedial planning.

6.2 SOIL REPRESENTATIVENESS EVALUATION

The Representativeness Evaluation is an evaluation and demonstration of the adequacy of the spatial and temporal data sets used to support the conclusions in this Phase II CSA. Per MassDEP guidance (MassDEP, 2007), the elements of the Representativeness Evaluation are presented in the following sections.

Use of Field Screening Data

During the initial site investigation activities, field screening in the form of headspace screening and visual/olfactory observations was conducted at every soil boring completed by Woodard & Curran. Woodard & Curran collected field screening data at a frequency of approximately once every vertical foot to represent distinct soil layers within a given boring.

The primary use of field screening data during the initial sampling event was to assess likely extents of petroleum and VOC impacts in soil samples by the PID measurement of soil headspace concentrations because chlorinated solvents were originally thought to be a significant contaminant of potential concern for the site. The headspace data was used to assist in selection of sampling intervals for laboratory analysis and as a secondary indicator of the absence or presence of OHM impacts at a particular sample location. However, analytical laboratory data did not correspond to elevated headspace readings and in general, very low level concentrations of VOC COPCs, including chlorinated solvents, exist at the Property. Results from the sampling indicated that dielectric fluids (specifically those containing PCBs) and heavy metals comprise the majority of contamination present at the Property, neither of which possesses volatile properties.

During subsequent sampling events, field screening via PID and jar-headspace techniques continued only as an additional method to collect soil characterization data. Based on the consistent visual presence of anthropogenic debris and the presence of metals and PCBs across the Property, that the majority of soils present could be characterized as historical fill. As such, sampling locations and intervals were primarily pre-determined based on any apparent data gaps relating to delineating the extent of OHM, as identified during a review of historical site data and initial site assessments.

Sampling Rationale

Initial sampling events were conducted by Woodard & Curran to develop a more comprehensive understanding of the type and extent of contamination existing on site. Following a review of the initial data results, a characterization

sampling program was developed in consultation with EPA and MassDEP to address data gaps in the vertical and lateral distribution of soil impacts across the site, or to better define areas of impact.

Number and Spatial Distribution of Samples

The number and location of soil borings across the Property and at off-Property locations were developed by Woodard & Curran in consultation with EPA and MassDEP to evaluate lateral and vertical distribution of impacts. A total of 313 samples were collected from 157 on-Property borings across an approximate 37,500 square foot area. An additional 73 samples were collected from 26 borings advanced at off-Property locations. With respect to PCBs, the major site contaminant anticipated to drive remediation activities, a 20-foot sample grid was achieved across the majority of the Property and off-Property locations with vertical delineation conducted to depths up to 17 feet bgs.

Based upon the above information and the analytical sampling results, the number and locations of samples are considered appropriate for the purposes of this Phase II CSA. The existing dataset is considered sufficient to delineate the Disposal Site boundary and the locations of the various AOIs across the Property and to characterize risk (e.g., identify exposure pathways and receptors, identify Hot Spots, calculate exposure point concentrations, and identify background).

Temporal Distribution of Samples

Given that 1) the contaminants of concern are based on historical releases of PCBs and metals from historical operations dating back to the 1940's 2) limited groundwater impacts were identified from soil impacts; and 3) are not anticipated to drive remediation, the temporal distribution of soil samples is not considered to be a limiting factor with regard to site characterization.

Completeness

No data gaps have been identified within the existing dataset. All samples were analyzed as planned, and sampling locations are appropriately distributed across the Property. No significant data gaps were identified during the Representativeness Evaluation.

Inconsistency and Uncertainty

No inconsistent data were identified. The COPCs identified in soils are consistent with the known sources of releases at the Property and/or the presence of historical fill. Field observations are consistent with analytical results for both on and off Property locations.

Information Considered Unrepresentative

No data are considered unrepresentative of site conditions.

6.3 GROUNDWATER DATA USABILITY ASSESSMENT

A summary of the usability assessment for groundwater data is presented below:

- Consistent procedures and laboratory analysis of the data were achieved. Sample containers were packed on ice and delivered to the laboratory under standard chain of custody procedures.
- Samples were received at the laboratory within the acceptable temperature range (4° Celsius +/-2°).
- All samples were extracted, digested, and/or analyzed within allowable holding times for the applicable methods.
- The data packages were reviewed to ensure that all sample and associated quality assurance results were available. Results of the completeness review indicated that all collected samples were analyzed and all quality control results were available to complete the data validation process.

VOCs

- No VOC field duplicate samples were collected. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the recoveries for LCS and LCSD. No MS/MSD was performed on the data packages. LCS/LCSD recoveries and RPDs met the acceptance with the exceptions of 2-butanone and tetrahydrofuran in some samples. However, analytical results for the compounds in the affected samples were non-detect and no qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the surrogate recoveries. The surrogate recoveries met the acceptance criteria. No qualifications were applied.
- All VOC method blanks were non-detect for target compounds. No qualifications were applied.
- VOC field/trip blank samples were non-detect for target compounds with the exception of reported concentrations of acetone and tetrahydrofuran in one sample at concentrations below the RL but above the MDL. No qualifications were applied because the affected samples were non-detect for the two compounds.
- According to the case narrative, some samples were analyzed at dilutions due to the high concentration of target compounds and/or the sample matrix. Reporting limits for those samples were elevated as a result of the dilutions.

VPH

- No VPH field duplicate samples were collected. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the recoveries for LCS and LCSD. No MS/MSD was performed on the data packages. LCS/LCSD recoveries and RPDs met the acceptance criteria. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the surrogate recoveries. All VPH surrogate recoveries met the acceptance criteria. No qualifications were applied.
- VPH method blanks were non-detect for target compounds. No qualifications were applied.
- No VPH field blank samples were submitted with the analytical samples. No qualifications were applied.
- According to the case narrative, some samples were analyzed at dilution due to the high concentration of target compounds and/or due to the sample matrix. Reporting limits in the affected samples are elevated based on the dilutions performed.

EPH

- Two EPH field duplicate samples were collected to evaluate the precision of the analytical results. Relative percent difference (RPD) between the primary and associated duplicate samples met the acceptance criteria. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the recoveries for LCS and LCSD. No MS/MSD was performed on the data packages. LCS/LCSD recoveries and RPDs met the acceptance criteria. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the surrogate recoveries. EPH surrogate recoveries did not meet the acceptance criteria in 21 of the samples. Analytical results for the affected samples were qualified as estimated (J,J-,UJ) based on these results.
- EPH method blanks had detections for several compounds above the MDL but below the RL as described in the data validation summaries. Analytical results from the affected samples were qualified based on these results. The analytical laboratory "B" flag was removed from several of the samples based on these results and some of the samples were qualified undetected (U) at the reporting limit.

- No EPH field blank samples were submitted with the analytical samples. No qualifications were applied.

PCBs

- All PCB surrogates were diluted out. No qualifications were applied to the data.
- The PCB method blanks were non-detect for target compounds. No PCB field blank samples were collected and submitted for analysis. No qualifications were applied.
- Accuracy of the analytical data was assessed by reviewing the recoveries for LCS and LCSD. No MS/MSD was performed on the samples. All PCB LCS/LCSD recoveries and RPDs met the acceptance criteria. No qualifications were applied.
- No duplicate samples were submitted for PCB analysis. No qualifications were applied.
- Impacted sediment is believed to be in the bottles used for analyzing the unfiltered samples for WCMW-1 on January 31, 2014 and therefore is not considered usable in this Phase II CSA.

Metals

- Method blank sample results from one data set contained reported concentration of zinc at a concentration above the MDL but below the RL. The laboratory "B" flag was removed from the samples and the results from affected samples were either qualified as undetected (U) at the RL or not qualified for those samples with reported concentrations above the RL. See the data validation summaries for additional information.
- Two metals field duplicate samples were submitted to evaluate the precision of the analytical results. RPDs between the primary and associated duplicate samples met the acceptance criteria. No qualifications were applied to the data. No metals laboratory duplicate samples were analyzed with the data packages.
- Accuracy of the analytical data was assessed by reviewing the recoveries for LCS/ LCSD and MS/MSD. LCS/LCSD and MS/MSD results met the acceptance criteria. No qualifications were applied.
- No metals field blank samples were submitted with the analytical packages. No qualifications were applied.

6.4 GROUNDWATER REPRESENTATIVENESS EVALUATION

The Representativeness Evaluation is an evaluation and demonstration of the adequacy of the spatial and temporal data sets used to support the conclusions in this Phase II CSA. Per MassDEP guidance (MassDEP, 2007), the elements of the Representativeness Evaluation are presented in the following sections.

Use of Field Chemistry Parameters

During the groundwater sampling events, low flow sampling techniques and field chemistry parameters were used to evaluate when water-purging activities from the wells was representative of subsurface conditions and not the annular space around the wells. Overall, stability was achieved during the sampling event at each well, indicating that the water collected for laboratory analysis was representative of the groundwater conditions within the aquifer.

Sampling Rationale

Two groundwater sampling events were conducted by Woodard & Curran to develop a data set across the Property with seasonal variations.

Number and Spatial Distribution of Samples

Groundwater samples were collected from overburden monitoring wells across the Property. While sampling of the bedrock aquifer was not conducted, based on the Conceptual Site Model and the relative low concentration of COPCs in overburden wells within the three AOIs, the sampling of the bedrock aquifer does not impact the representativeness of the data set.

Temporal Distribution of Samples

Given that the contaminants of concern for the Property are based on historical releases of PCB and metals and that limited groundwater impacts identified are not anticipated to drive remediation, the temporal distribution of samples is not considered to be a limiting factor with regard to site characterization. In addition, based on the availability of data from three different sampling events within a one year time period, temporal distribution is considered adequate for the data quality objectives of the sampling program.

Completeness

No data gaps have been identified within the existing dataset. Collected samples were analyzed as planned, and sampling locations are appropriately distributed across the Property. No significant data gaps were identified during the Representativeness Evaluation.

Inconsistency and Uncertainty

No inconsistent data were identified. The COPCs identified in groundwater are consistent with the known sources of release at the Site with the exception of PCBs in groundwater detected in the unfiltered sample collected from WCMW-1 on January 31, 2014.

Information Considered Unrepresentative

As described in Section 5.4 above, analytical results for PCBs in the unfiltered groundwater sample collected from WCMW-1 in January 2014 are considered not representative of the groundwater conditions. Based on the results from the filtered sample, which indicated that PCBs were non-detect ($<0.233 \mu\text{g/L}$), PCBs reported in the unfiltered sample are considered to be unrepresentative of existing conditions at the Property.

7. SITE GEOLOGY AND HYDROGEOLOGY

This section presents an assessment of the topography, stormwater runoff, overburden soil and bedrock geology, and hydrogeologic conditions at the Property.

7.1 TOPOGRAPHY AND STORMWATER

The Property is located within a commercial and residential area of Quincy located north of the Crown Colony Office Park, an area which was historically a granite quarry. The surface topography of the Property and surrounding properties is generally flat with gently sloping grades. Stormwater runoff at the property generally splits (to the north and south) from the center of the Property but will infiltrate to the subsurface before leaving the Property because it is entirely unpaved. However, the northern and western Property boundary is gently sloped to the 500 Congress Street and 40 Vernon Street properties, which would allow stormwater runoff to collect and infiltrate in the landscaped areas along the fence line. The surrounding properties to the east, south, and west are parking lots that are elevated approximately three feet above the ground surface of the Property likely as a result of historical filling for the construction of Crown Colony Office Park. The 40 Vernon Street property to the north is approximately at the same elevation as the Property.

7.2 OVERBURDEN AND BEDROCK GEOLOGY

The majority of the Property and the surrounding properties were subject to the placement of historical fill to support development and commercial operations. Subsurface investigations completed to date have confirmed the presence of fill material in the upper six to eight feet. Anthropogenic materials such as metal fragments, glass, porcelain, plastic, and slag were all identified during soil characterization completed by Woodard & Curran. The underlying stratigraphy consists of interbedded sequences of dense silt, and coarse to fine sand, which generally grades toward more sand with depth. Organic peat was also observed in several of the soil borings throughout the Property at a depth of approximately 8-15 feet bgs. The hydrogeologic units observed during drilling indicate complex subsurface heterogeneities, with alternating sequences of glaciofluvial, glaciolacustrine, and swamp/bog deposits overlain by historical fill.

Bedrock was not encountered during drilling activities at the Property (maximum drilling depth of 25 feet bgs), and there are no bedrock outcrops at the Property or nearby properties. According to the USGS Generalized Lithology and Lithogeochemical Character of Near-Surface Bedrock in the New England Region (Robinson et al., 2003, MassGIS December 2013), bedrock underlying the Property is part of the Avalon Belt Formation consisting of mainly granite.

7.3 HYDROGEOLOGIC CONDITIONS

Depths to groundwater generally ranged between approximately five and nine feet bgs and were used to calculate groundwater elevations from surveyed reference elevations for wells on the Property. During the two events, groundwater elevation changes across the property were less than one foot. The groundwater contours developed during each sampling event are provided on Figures 6 and 7. Based on the network of wells included in the contour development (well locations WCMW-5 and WCMW-7 were not utilized when developing groundwater gradients due to the well screen being set in a confining peat layer and WCMW-8 was not utilized due to damage to the well casing), overburden groundwater flow at the Property generally indicated two flow directions, east and northeast.

Across the majority of the Property, the horizontal gradients were shallow. Horizontal hydraulic gradients ranged from 0.003 feet/foot to 0.005 feet/foot. While field hydraulic conductivity values were not obtained through field measurements, soil characteristics (silts and sands) would suggest a value of between 1.0×10^{-3} to 1.0×10^{-5} centimeter/second (cm/s) over the majority of the overburden materials. Based on the limited presence of a confining peat layer at depths of between 8 and 15 feet bgs, isolated areas of lower hydraulic conductivities in the range of

1.0×10^{-9} cm/s may be present in some areas within the water table. These hydraulic conductivities are further supported by the results of groundwater sampling conducted to date (in relation to the historic nature of the release), the limits of impacted media, and the overall flat hydraulic gradients across the Property. Based on these factors, groundwater seepage velocities are not expected to exceed 200 feet per year.

7.4 SURFACE WATER

Surface water features are not located on the Property or adjacent properties. The nearest surface water located in the vicinity of the Property as follows:

- Unnamed surface water located approximately 300 feet and 1,300 feet south (crossgradient/upgradient) of the Property that appear to be stormwater retention basins;
- Unnamed surface water located approximately 550 feet southwest (upgradient) of the Property that appear to be stormwater retention basins;
- Unnamed surface water located approximately 1,700 feet west (upgradient) of the Property that appear to be stormwater retention basins; and
- Town Brook approximately 1,500 feet east (downgradient) of the Property.

Based upon groundwater analytical data, surface water features in the vicinity of the Property are not expected to be impacted by releases at the Property.

8. NATURE AND EXTENT OF OHM

8.1 NATURE OF THE RELEASE

Historical information available to Woodard & Curran indicated that in March 1986, a fire involving a 55-gallon drum of materials occurred at the Property. During the initial attempt to control the fire, the contents of the drum were released to the environment. A Senior Sanitary Engineer with MassDEP (formerly DEQE), investigated the release and determined that hazardous materials, specifically waste oil and waste solvent, may have been stored improperly on the Property. It was reported that the soil and/or groundwater were potentially contaminated with OHM.

The entire release history of the Property is unknown as there were likely additional unreported releases related to daily operations which occurred prior to and following release notification to MassDEP. The Property was an active auto salvage and scrapping yard for close to 50 years. Automobiles, machinery, tires, metal scrap, transformers, etc. were stockpiled in the undeveloped area south of the former building referred to as the "yard." Evidence of such materials mishandling can be observed in the form of extensive surficial soil staining in this area and analytical data presented in this Phase II CSA report. Dielectric fluid (oil) containing PCBs and metals that may be found in transformer oil include but are not limited to aluminum, barium, chromium, copper, iron, lead, silver, and zinc. It is likely that operations conducted at the Property resulted in the existing conditions identified at the Property and adjacent properties (500 Congress Street and 40 Vernon Street). PCBs, heavy metals, EPH, VPH, and VOC contamination can all be attributed to such processes known to have previously occurred at the Property.

8.2 EXTENT OF SOIL IMPACTS

The primary OHMs of concern are PCBs and metals, which were detected at Property and off-Property locations (500 Congress Street and 40 Vernon Street). The most common metals detected are cadmium, chromium, lead and nickel. EPH, VPH and VOC are also minor COPCs identified at the Property. Elevated PCBs and metals, as evidenced by laboratory results, are present in the surficial soils (0-3 feet bgs). In general, elevated metals concentrations corresponded to locations of elevated PCB concentrations in surficial soils. However, elevated concentrations of PCBs and metals in subsurface soils do not directly correspond to surficial contamination (i.e. surficial and subsurface conditions can vary greatly). Based on analytical results, elevated concentrations in deeper soil do not extend across the vadose/capillary zone into the groundwater table with the exception of the former sump area (AOI #1) and a limited area within AOI #2. PCB impacts extend to a depth of approximately 15 feet bgs in AOI #1 (WCSB-20) and greater than 7 feet bgs in AOI #2 (S-29).

Based on the knowledge of historic site operations, visible soil staining, and the increased frequency and magnitude of COPCs detected in soil, three separate AOIs have been identified (AOI #1, AOI #2, and AOI #3). AOI #1 is the former sump source area located at the northwestern corner of the former building. AOI #1 is approximately 825 square feet and as previously mentioned, PCB contamination has been detected at an approximate depth of 15 feet bgs. AOI #2 is an area of approximately 2,721 square feet located in the central portion of the yard south of the former building structure. AOI #3 is an area of 5,961 square feet located in the southern portion of the "yard."

Overall, the distribution and extent of PCB, metals, EPH, VPH and VOCs varies since the releases may have occurred at different times, with different materials and at different magnitudes. Furthermore, the primary contaminants are not readily soluble and are unlikely to be transported uniformly from a point source (e.g., stormwater runoff, plowing the unpaved yard, etc.). Additionally, as noted in soil boring logs and from available history of the surrounding area, historical fill has been documented at the Property and adjacent properties. Differing volumes of fill and differing fill compositions across the Property may also contribute to the varying contaminant concentrations between locations and depths. Concentrations of metals, PAHs and other COPCs identified in fill materials at the Property and off-Property locations were considered part of the disposal site with the exception of two samples collected at 40 Vernon Street (WCVS-1 and WCVS-2).

8.3 EXTENT OF GROUNDWATER IMPACTS

The primary COPCs in the groundwater are similar to those detected in soil, including dissolved metals, EPHs, VPHs and VOCs. PCBs are insoluble in water unless in the presence of high concentrations of organic solvents. PCBs were detected above the laboratory reporting limit in a groundwater sample collected for WCMW-1 that was not filtered; however, given that high concentrations of organic solvents were not detected in groundwater at the property, the detection of PCBs is attributed to silt in the sample. This is further supported by results from a filtered groundwater sample collected at the same time which was non-detect for PCBs. Vinyl chloride was detected in samples of groundwater collected from MW-2R, WCMW-3, and WCMW-7. Elevated reporting limits above applicable Method 1 Risk Characterization standards makes it difficult to evaluate whether or not vinyl chloride would be present at other locations at the Property and will need to be evaluated further after remediation activities have been completed. Other chlorinated solvents and petroleum COPCs were detected across the Property; however, monitoring wells with average concentrations of COPCs above applicable Method 1 Risk Characterization standards (excluding vinyl chloride because of elevated detection limits) were MW-2R (VC), MW-4R (TCE), WCMW-3 (VC), WCMW-6 (zinc), WCMW-7 (cDCE, TCE, VC), and WCMW-8 (cadmium). Based upon existing groundwater analytical data, detected COPCs (TCE, cDCE, VC, zinc and cadmium) are infrequent and irregular and will need to be monitored after remediation activities.

9. ENVIRONMENTAL FATE AND TRANSPORT CHARACTERISTICS

9.1 CHEMICAL/PHYSICAL CHARACTERISTICS

The categories of COPCs at the Property and adjacent properties include PCBs, metals, petroleum (EPH/VPH), and VOCs. Characteristics of the various categories of compounds may be summarized as follows:

Category of OHM	Relative Solubility in Water	Relative Volatility	Relative Persistence	Relative Bioaccumulation Potential
PCBs	Low	Low	High	High
Metals	Low	Low	High	Moderate
EPHs	Low to Moderate	Low	Low to Moderate	Low
VPHs	Moderate	Moderate to High	Low	Low
VOCs	Moderate to High	Moderate to High	Low to Moderate	Low

The solubility of a compound establishes the upper limits of the concentrations at which a compound can dissolve in water. It should be noted that in complex mixtures such as groundwater, the effective solubility of individual compounds will differ significantly from the pure compound solubility. PCBs have extremely low solubility in water and will absorb to any suspended matter in the water column. Similarly, metals are typically insoluble in water however, some, such as zinc, can persist in water indefinitely.

The octanol/water partitioning coefficient (K_{ow}) and the organic carbon/water partitioning coefficient (K_{oc}) define the tendency of a compound to adsorb to organic matter in soil relative to the affinity for water. Higher K_{ow} or K_{oc} values indicate that a compound will adsorb more strongly to soil and therefore, will leach more slowly from soil into groundwater. The PCB Aroclors and metals at the Property and adjacent properties generally have high K_{ow} and K_{oc} values, and the petroleum ranges generally have moderate K_{ow} and K_{oc} values. Other VOCs and VPH COPCs identified at the Property generally have higher K_{ow} and K_{oc} values.

According to the USEPA Technical Factsheet on PCBs, PCBs experience tight adsorption when in soils and adsorption generally increases with the degree of PCB chlorination. The higher chlorinated PCBs will have a lower tendency to leach and it is only when in the presence of organic solvents that PCBs will leach rapidly through the soil matrix.

Additionally, according to a USEPA study titled *Behavior of Metals in Soils* (Mclean & Bledsoe, 1992), metals contamination in soil will normally be retained at the soil surface. The retention mechanisms for metals in soils typically include adsorption or precipitation. The extent of movement of metals contamination in soils correlates closely to soil properties including but not limited to pH, clay content, organic matter, and/or particle surface area. The natural weathering or changes in soil composition may increase the mobility of metals over time.

Henry's Law constants are a relative measure of volatility. The Henry's Law constants for VPH and VOCs are moderate to high, and volatile EPH COPCs are very low to moderate. For PCBs, the rate of volatilization decreases with increasing chlorination and therefore, is typically very low. PCBs have negligible vapor pressure and are not expected to volatilize. Also according to the USEPA Technical Factsheet, if released to the atmosphere, PCBs will primarily exist in the vapor-phase, with particulate phase associating increasing with chlorination. Volatilization only applies to select metals (mercury), when under certain conditions.

VOCs at the Property have relatively short to moderate half-lives, indicating that these detected COPCs may degrade relatively quickly if the appropriate conditions are present. The PCBs and metals at the Property are less susceptible

to degradation and are therefore relatively persistent in the environment. Biodegradation of PCBs in the environment is very slow due to the stability and persistence of the contaminant.

Bioconcentration factors for the VOCs, petroleum hydrocarbons, and PAHs are low; therefore, these compounds are not expected to bioaccumulate in organisms. PCBs have a generally high bioconcentration factor; however, bioconcentration of PCBs is expected mostly in aquatic organisms and therefore, this is not expected for the current extent of contamination at the property. Additionally, certain metals, such as zinc, can bioaccumulate significantly.

9.2 POTENTIAL MIGRATION PATHWAYS

Potential migration pathways for OHM may include soil, groundwater (including migration along preferential pathways such as subsurface utility lines), and air.

9.2.1 Soil

Surficial soils and soils located less than 3-feet bgs at the Property are primarily impacted by PCBs and metals. EPH, VPH and VOC COPCs have also been detected at very low concentrations and limited frequency. For current conditions, COPCs present in surficial soils may migrate via fugitive dust, erosive forces, vapor loss (primarily chlorinated VOCs and petroleum products), biodegradation, and/or soil leaching. Because the majority of the Property is unpaved, the impacted surficial soils are subject to wind and stormwater erosion. However, based on the localized topography of the Property and the elevated nature of surrounding parcels (current conditions), minimal overland flow is believed to be generated during rain events and would be limited to the landscaped area located along the northern and western property boundary. If subsurface soil is exposed during potential excavation activities, the subsurface soil may be subject to similar transport mechanisms except stormwater runoff.

9.2.2 Groundwater

Low concentrations of dissolved metals, VOCs, VPH and EPH COPCs were detected in the groundwater at the Property. PCBs and metals are typically insoluble in water and would potentially migrate through the groundwater via bioaccumulation and/or adsorption to suspended particulates. Based upon the current extent of impacts to groundwater, the absence of active sources of petroleum and VOCs, and the likely age of the release (greater than 25 years ago), migration of COPCs in groundwater beyond the disposal site boundary at concentrations exceeding risk-based standards is not likely.

9.2.3 Air

VOC and petroleum COPCs (EPH/VPH) were detected in groundwater and vadose zone soils and groundwater has been recorded at depths less than 15-feet bgs. However, concentrations detected in either media were relatively low. Theoretically, volatile COPCs in soil and groundwater may serve as a source of impact to indoor air. The indoor air pathway was not evaluated because no building structures exist at the property, remediation activities are planned for the near future, and VPH and VOCs were not detected in groundwater samples collected from monitoring wells located in the GW-2 area (i.e. WCMW-1 and WCMW-4).

10. CONCEPTUAL SITE MODEL AND DISPOSAL SITE BOUNDARY

The Property is zoned for industrial use, is currently not occupied or developed, and is secured with a lockable chain-link fence. The City obtained the Property via tax foreclosure in 2009. Prior to 2009, the Intervale Street properties were owned by Henry P. Gregoire of PDM Metals, Inc. The former building structure was constructed in 1943 with small exterior additions occurring in the early to mid-1970's. Since the early 1940's, the Property was utilized as a junk and auto salvage yard with the most recent documentation of site activity occurring in the late 1990's. Demolition of the building was completed in August-September 2013 to facilitate comprehensive site assessment activities. Building structures including the lift, cess pool, and scale were removed and are not considered potential sources of impacts at the Property. However, the former sump (AOI #1) was identified as a source area for impacts to soil and groundwater. In addition, a fire in 1986 involving a 55-gallon drum of apparent waste oil and solvent as well as mishandling of OHM associated with daily operations contributed to petroleum and VOC impacts to soil and groundwater in the vicinity of the former building. Historical operations conducted outside in the "yard" particularly in AOIs #2 and #3 included cutting of transformers that had dielectric fluid containing PCBs, storing waste oils and lead-acid batteries, and using tar-like material to coat manholes also contributed to impacts in these areas. Based upon our existing understanding of historical operations, potential sources of impacts have been eliminated but residual mass remains and will need to be mitigated to achieve a Permanent Solution.

Elevated concentrations of PCBs and metals in soil are located in AOIs #1, #2, and #3 from historical operations particularly in the top 3 feet of soil. Deeper impacts are located in AOI #1 (approximately 15 feet bgs) and AOI #2 (greater than 7 feet bgs) and are likely present due to prolonged discharges to these areas because of mishandling OHM at the Property. Data collected as part of Phase II CSA and RAM activities indicate that elevated concentrations of PCB Aroclors, MCP metals, EPH carbon ranges and PAH COPCs remain in soils at the Property. VOC COPCs and VPH carbon ranges are also present at relatively low concentrations in soil. The primary COPCs, specifically PCBs and metals, will adsorb tightly to soils, will leach very slowly and will persist for prolong periods in the environment. Vertical migration into the soil was presumably limited due to the very compact nature of the historical fill, the dense nature of the silty substrate, and the very low concentrations of COPCs in groundwater.

Impacted soils are present outside of the AOIs likely due to multiple factors including wind erosion, heavy precipitation events and resulting stormwater runoff and erosion, plowing snow in the unpaved areas (the yard), and potentially drips, spills, and overspray of OHM during historical operations. Impacted historical fill was also identified across the entire Property and is contributing to the overall risks at the Property. These factors and the storage of OHM near the northern and western fence line (adjacent to 500 Congress Street and 40 Vernon Street) contributed to off-Property impacts identified during Phase II CSA activities.

Routes of exposure are limited due to the locked chain-link fence surrounding the Property. However, construction workers during remediation activities and nearby residents and office parks may be exposed to airborne contaminants when the soil is handled and/or during excessively windy days. Incidental ingestion, dermal contact and/or inhalation is possible for trespassers and/or site workers. These exposures are anticipated to be limited and can be managed during remediation activities. Groundwater is not a source of drinking water, impacts are limited to low concentrations of VOCs and metals, and the depth to groundwater is approximately 5 to 9 feet bgs; therefore, exposure to impacted groundwater is limited and may be encountered during utility work at the Property. The fact that groundwater is minimally impacted by historical operations relative to soil impacts is indicative of the properties of the primary COPCs (PCBs and metals; insoluble, low volatility, and an affinity for soil with limited ability to leach into groundwater). VOCs in soil and groundwater could pose a vapor intrusion risk for potential future Property occupants and will likely be addressed during remediation activities. Environmental receptors are not anticipated to be impacted by existing OHM at the Property based upon the distance to the nearest surface water feature (small wetland/stormwater basin located approximately 300 feet to the south, upgradient of the Property), the very dense nature of the soil, the location within an urban area, and the fact that sources have been eliminated.

Refer to Figure 8 for a Stem and Leaf Diagram of the Conceptual Site Model.

Disposal Site Boundary

The disposal site boundary (DSB) was established based upon review of the data obtained during field assessments and laboratory analytical data. The DSB is illustrated on figures included in this Report and encompasses soil sampling locations that have detectable concentrations of PCBs, metals, EPH/VPH, and VOCs above laboratory reporting limits. The existing DSB does not account for historical fill that was identified at the Property or adjacent properties with the exception of 2 samples (WCVS-1 and WCVS-2) collected on the 40 Vernon Street property that were excluded based upon concentrations of COPCs detected in soil that are related to historical fill materials.

The DSB comprises approximately 36,000 square feet (0.83 acres) across the 175 & 189 Intervale Street property, the paper street, and portions of 500 Congress Street and 40 Vernon Street. Based upon soil samples collected within the groundwater table at the disposal site, the vertical extent of the Site extends to a depth of up to 15 feet bgs in AOI #1, greater than 7 feet in one small area within AOI #2, and at an average depth of approximately 3 to 5 feet bgs in other areas of the disposal site.

11. RISK CHARACTERIZATION

A characterization of risk to human health, safety, public welfare, and the environment was completed for the disposal site in general accordance with procedures outlined in the MCP and in a manner consistent with scientifically acceptable risk assessment practices established by the MassDEP and the USEPA. For this disposal site, a “streamlined” MCP Method 1 Risk Characterization (RC) approach was used because conditions are such that additional response actions are necessary to achieve No Significant Risk.

11.1 SOIL AND GROUNDWATER CLASSIFICATION

11.1.1 Soil

The disposal site is located in a light industrial zoned area with commercial properties occupying the adjacent parcels. Residential properties are located within 500 feet of the Property. The Property is a vacant lot located at the dead end of a road. The site is secured by a lockable perimeter chain-link fence. The Property is unpaved with exposed gravelly soil, which is mostly devoid of grass or vegetative cover in most areas. Trees line the disposal site along the southern and western property boundaries, with a narrow landscaped area separating the Crown Colony Office Park parking lot from the Property fence line.

Since the Property is currently vacant and secured, children are not likely to be present. Therefore, under current conditions, unpaved accessible surface soils (0-3 feet) are classified as S-2 in accordance with MCP Method 1 criteria. Potentially accessible soils (3-15 feet unpaved or 0-15 feet paved) and isolated subsurface soils (greater than 15 feet or beneath the footprint of buildings) are classified as S-3.

In addition to current uses, the MCP also requires that foreseeable future activities and uses be considered when classifying soil at a disposal site. Since no Activity and Use Limitation (AUL) exists to restrict future uses at the Property, soils will be considered S-1 based on potential future uses. MCP S-1 soil standards were conservatively used for the purposes of this risk assessment. Figures 4 and 5 illustrate sample locations in surficial and subsurface soils exceeding Method 1 S-1 Risk Characterization standards and do not consider historical fill background concentrations with the exception of WCVS-1 and WCVS-2 (i.e., these samples were removed from the disposal site boundary because of the presence of fill materials).

11.1.2 Groundwater

Groundwater at the Property is not a current or potential source of drinking water, based on a comparison of site conditions to the seven criteria established by Section 310 CMR 40.0932 for GW-1 classification: groundwater is not 1) within a Zone II for a public water supply; 2) within an Interim Wellhead Protection Area for a public water supply; 3) within a Zone A of a Class A Surface Water Body used as a public water supply; 4) located within 500 feet of a private water supply well; 5) located 500 feet or more from a public water supply distribution pipeline; 6) within an area designated by a municipality specifically for the protection of groundwater quality to ensure its availability for use as a source of potable water; and 7) within a Potentially Productive Aquifer that has not been excluded as a Non-Potential Drinking Water Source Area. Therefore, groundwater is not classified as GW-1.

The MCP requires that groundwater be classified as GW-2 if it is located within 30-feet of an existing occupied building or structure, and the average annual depth to groundwater in that area is 15-feet or less. When two such conditions are met, impacted groundwater is considered a potential source of vapors to indoor air and is classified as GW-2 under the MCP. The depth to groundwater in the vicinity of the disposal site is generally at depths between 5 to 12 feet bgs. Additionally, two (2) businesses, Groleau Landscaping and TLC Supply, Inc., occupy buildings within 30-feet of the disposal site to the north and northwest. Therefore, groundwater in the vicinity of these establishments is considered GW-2. Future buildings at the Property will need to consider the potential for vapor intrusion at the Property and therefore, groundwater was compared to the GW-2 standards.

All groundwater in the Commonwealth of Massachusetts is also classified as GW-3, which assumes that groundwater will ultimately migrate and discharge to surface water. The nearest surface water is a man-made stormwater basin and small wetland area located approximately 300 feet south (crossgradient/upgradient) of the southern extent of the DSB. Town Brook and related wetlands are located approximately 0.25 miles (1,320 feet) east of the Site and the Old Quincy Reservoir located approximately one mile south of the Property. Therefore, groundwater beneath the disposal site is classified as GW-3.

11.2 CONSTITUENTS OF POTENTIAL CONCERN

The COPCs associated with mishandling of OHM during historical operations conducted by PDM, Inc. that were detected at least once above the laboratory reporting limits in soil and/or groundwater samples are considered COPCs. Concentrations of these COPCs in historical fill were not contemplated in this Method 1 RC and were assumed to be related to historical operations with the exception of soil sample locations WCVS-1 and WCVS-2. COPCs related to the historical releases to soil and/or groundwater at the Property include:

PCBs (USEPA 8082)	Metals	EPH (MassDEP)	VPH (MassDEP)	VOCs (USEPA 8260)	
Aroclor-1242	Aluminum	C9-C18 Aliphatics	C5-C8 Aliphatics	1,2,3-Trichlorobenzene	Dichlorodifluoromethane
Aroclor-1248	Antimony	C19-C36 Aliphatics	C9-C12 Aliphatics	1,2,4-Trichlorobenzene	Ethylbenzene
Aroclor-1254	Arsenic	C11-C22 Aromatics	C9-C10 Aromatics	1,2-Dichlorobenzene	m-Xylene & p-Xylene
Aroclor-1260	Barium	2-Methylnaphthalene	Benzene	1,3-Dichlorobenzene	Naphthalene
Total PCBs	Beryllium	Acenaphthene	Ethylbenzene	1,4-Dichlorobenzene	o-Xylene
	Cadmium	Acenaphthylene	m+p Xylene	2-Butanone (MEK)	Styrene
	Calcium	Anthracene	Methyl tert-Butyl Ether (MTBE)	4-Methyl-2-pentanone (MBK)	tert-Amyl Methyl Ether (TAME)
	Chromium	Benzo(a)anthracene	Naphthalene	Acetone	Tetrachloroethene
	Hexavalent Chromium	Benzo(a)pyrene	o-Xylene	Benzene	Tetrahydrofuran
	Cobalt	Benzo(b)fluoranthene	Toluene	Bromomethane	Toluene
	Copper	Benzo(g,h,i)perylene		Carbon disulfide	trans-1,2-Dichloroethene
	Iron	Benzo(k)fluoranthene		Chlorobenzene	trans-1,3-Dichloropropene
	Lead	Chrysene		Chloromethane	Trichloroethene
	Magnesium	Dibenz(a,h)anthracene		cis-1,2-Dichloroethene	Trichlorofluoromethane
	Manganese	Fluoranthene			Vinyl chloride
	Mercury	Fluorene			
	Nickel	Indeno(1,2,3-cd)pyrene			
	Silver	Naphthalene			
	Selenium	Phenanthrene			
	Thallium	Pyrene			
	Vanadium				
	Zinc				

The above analytes were evaluated further in this RC. Please note that VOCs including 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 4-isopropyltoluene, isopropylbenzene, sec-Butylbenzene, n- Butylbenzene, and n-propylbenzene were not retained for the purpose of this RC because these analytes fall within the C₉-C₁₂ aliphatic hydrocarbon range which was included in this RC.

11.3 IDENTIFICATION OF EXPOSURE PATHWAYS AND EXPOSURE POINTS

The majority (greater than 99 percent) of the Property is currently unimproved and unpaved. The Site is vacant, unoccupied and is currently zoned for light industrial uses. Based upon current subsurface investigation data, a small portion of the DSB includes areas outside the Intervale Street property fence line (500 Congress Street and 40 Vernon Street). This area includes a small wooded/grass strip along the adjacent parking area at 500 Congress Street and a small fenced in area behind a building structure at 40 Vernon Street. The probability of anyone being present in these areas for an extended period is low. Employees, utility workers, and trespassers would be the only receptors to access soil under current conditions. Additionally, for the purposes of the human health RC, it was assumed that no restrictions would be placed at the Property that would prevent exposure of future receptors to impacted soil. Accordingly, it was assumed that these impacted soils may be brought to the surface and exposed in the future. Under future scenarios, trespassers, facility workers, construction/utility workers or hypothetical future site

residents may be exposed to COPCs in soil. Currently, no private wells exist at the Site or in the vicinity. Historically, the Property was serviced by municipal water. Therefore, if re-developed under future conditions, the only receptors who could potentially be exposed to groundwater beneath the Property are construction and utility workers.

Current employees at the Property and potential future occupants and/or residents could theoretically be exposed to VOC or VPH COPCs via volatilization from groundwater or soil, into soil gas, and into indoor air. However, based on analytical data and field screening completed during sampling activities, volatilization is likely minimal. However, future receptors inside of new buildings will need to evaluate the potential vapor intrusion pathway assuming that remediation activities do not reduce VOCs in soil and groundwater.

The following exposure assumptions were used to complete this RC. However, as discussed in the following sections, multiple COPCs (PCBs, lead, and zinc) exceeded Upper Concentration Limits (UCLs) in soil.

11.3.1 Soil

Exposure Point Concentrations (EPCs) for soil were calculated based upon a spatial average (based upon the location within the disposal site and depth of the soil samples). EPCs were calculated for accessible soils (soils less than 3 feet bgs, including surficial soils) and potentially accessible soils (soils greater than 3 feet bgs). The spatial average for COPCs within the disposal site boundary were used to estimate EPCs for soil. To conservatively evaluate risks at the Property and because remediation activities are planned for the Property, elevated concentrations were included in the overall EPC for each constituent which increased the EPC. In addition, elevated concentration of COPCs are not located in areas that would be associated with higher exposure potentials compared to the overall exposure potential across the disposal site and are not considered Hot Spots. When COPCs were not detected at concentrations above laboratory reporting limits, half the reporting limit was used for averaging purposes. Soil EPCs are summarized in Tables 1-1 through 1-4.

Property EPCs (refer to Tables 1-1 and 1-2)

- For accessible surface soils (0-3 feet bgs), EPCs for 1,4-dichlorobenzene, chlorobenzene, dibenz(a,h)anthracene, PCB Aroclor 1242, PCB Aroclor 1254, PCB Aroclor 1260, total PCBs, lead, and zinc exceeded one to all three of the applicable Method 1 RC standards.
- For potentially accessible soils (>3 feet to 15 feet bgs), EPCs for 1,4-dichlorobenzene, chlorobenzene, benzo(a)pyrene, dibenz(a,h)anthracene, PCB Aroclor 1260, total PCBs, and lead exceeded one to all three of the applicable Method 1 RC standards.

Off Property EPCs (refer to Tables 1-3 and 1-4) – combined 500 Congress Street and 40 Vernon Street

- For accessible surface soils (0-3 feet bgs), EPCs for PCB Aroclor 1260, total PCBs, lead, and zinc exceeded Method 1 S-1 RC standards.
- For potentially accessible soils (>3 feet to 15 feet bgs), EPCs for PCB Aroclor 1254, total PCBs, lead, and zinc exceeded Method 1 S-1 RC standards.

Please note that sample locations WCVS-1 and WCVS-2 were not included in the EPC calculation for off-property samples because concentrations are consistent with background conditions likely associated with historical fill and/or below Method 1 S-1 standards.

11.3.2 Groundwater

EPCs were calculated for all monitoring wells where COPCs were historically detected and are located within the DSB. EPCs were calculated using the temporal average of COPCs detected at each exposure point (i.e., individual monitoring wells). When COPCs were not detected at concentrations above laboratory reporting limits, half the reporting limit was used for averaging purposes. When only one sample round of data was available, the single data point was used for the groundwater EPC. Note that for vinyl chloride, elevated reporting limits were provided by the laboratory, which elevated the EPC concentration to above the Method 1 RC standards. The concentrations present

at these locations generally do not represent risk when compared to applicable MCP Method 1 GW-3 groundwater standards for current conditions with the exception of resulting concentrations of cadmium and zinc at WCMW-6 and WCMW-8. However, downgradient monitoring wells in close proximity to these respective locations had cadmium and zinc detected at concentrations that were orders of magnitude less and previous sampling were inconsistent with other sampling events at these wells. Based on the hydraulic gradient and the distance to surface water, these EPC exceedances do not pose a significant risk. In addition, WCMW-4 and WCMW-1 are compared to Method 1 GW-2 RC standards since they are currently located within 30-feet of an occupied building (north of these wells) and the depth to groundwater is less than 15 feet bgs. Future buildings at the Property with existing concentrations of COPCs could pose potential risk when compared to Method 1 GW-2 RC standards and will need to be considered after remediation activities and prior to achieving a Permanent Solution. COPC EPCs exceeding applicable Method 1 RC groundwater standards include TCE, cDCE, VC, cadmium, and zinc. Groundwater EPCs are summarized in Table 5.

11.4 COMPARISON TO UPPER CONCENTRATION LIMITS

Soil and groundwater EPCs and maximum detected concentrations were conservatively compared to the MCP UCLs on Tables 1-1 through 1-4 (soil) and Table 5 (groundwater). PCB Aroclor 1242, PCB Aroclor 1254, PCB 1260 and Lead exceed the soil UCLs. Zinc has a maximum soil detection equal to the UCL. Therefore, this condition precludes the achievement of No Significant Risk to Human Health or the Environment at the Site. No COPCs exceeded groundwater UCLs.

11.5 HOT SPOT EVALUATION

A “hot spot” is defined as a discrete area where COPC concentrations are substantially higher (greater than a factor of 10 to 100) than the average concentrations in the surrounding area. Identified hot spots must be considered as a distinct and separate exposure point. However, discrete areas that exhibit concentrations greater than a factor of 10 to 100 when compared to surrounding areas are not located in areas that would be associated with higher exposure potentials compared to the overall exposure potential across the disposal site. Therefore, hot spots were not identified during this evaluation and were not considered separate from exposure points.

11.6 CHARACTERIZATION OF RISK TO SAFETY

The risk of harm to safety is evaluated by comparing site conditions to applicable or suitably analogous safety standards. For the disposal site, no applicable or suitably analogous safety standards were identified.

The MCP identifies several additional criteria that need to be considered in evaluation of safety, including:

- The presence of rusted or corroded drums or containers, open pits, lagoons or other dangerous structures. None of these structures were observed on the Property.
- The threat of fire or explosion. No conditions were identified that would pose such a threat.
- Uncontained material that exhibits the characteristics of corrosivity, reactivity, or flammability. These materials were not observed at the time of the site investigations, nor are they likely to be present, given the nature of the known or potential releases at the disposal site.

Based upon the above evaluation, a condition of No Significant Risk of harm to safety exists for the Property, as no threat of physical harm or bodily injury to people was observed at the disposal site.

11.7 RISK CHARACTERIZATION SUMMARY

The risks associated with exposure to COPCs at the disposal site were evaluated with regard to human and environmental receptors using a Method 1 RC. The focus of this RC was based upon current and reasonably foreseeable exposures to human and environmental receptors at the Property.

During the streamlined RC process, Woodard & Curran identified that PCB Aroclors lead, and zinc are the primary COPCs in soil that exceeded applicable Method 1 RC standards and applicable UCLs for current uses and/or future residential uses. Other COPCs in soil that exceed applicable Method 1 RC standards include 1,4-dichlorobenzene, chlorobenzene, benzo(a)pyrene, and/or dibenz(a,h)anthracene. PAHs detected in historical fill identified at the Property are likely background conditions but were carried through this Method 1 RC with the exception of off-Property samples WCVS-1 and WCVS-2, which were ruled out based upon background conditions and/or concentrations less than Method 1 S-1 standards.

TCE, cDCE, VC, cadmium and zinc are the primary COPCs in groundwater that exceeded applicable (GW-3) and/or potentially applicable (GW-2) Method 1 RC standards. Based upon current uses of the Property, only cadmium and zinc exceeded GW-3 standards; however, these metals are not expected to be detected in surface water because downgradient wells from areas where exceedances were identified were below GW-3 standards at the Property and the nearest downgradient surface water is approximately 1,500 feet from the disposal site.

Therefore, the current disposal site conditions precludes the achievement of No Significant Risk to Human Health or the Environment at the Site. Results of the RC process were used to evaluate the need to implement additional response actions that will mitigate exposures and risks associated with residual COPCs at the Site. Based upon the conclusions of the Method 1 RC, additional response actions are necessary to achieve a Permanent Solution. Therefore, a Phase III Remedial Action Plan has been prepared to evaluate applicable remedial action alternatives to mitigate impacted soil which will ultimately reduce concentrations in groundwater.

12. PHASE II CSA CONCLUSIONS

This section summarizes the findings of the Phase II CSA for 175 & 189 Intervale Street in Quincy, Massachusetts. Historical research and field investigation activities conducted at the disposal site have led to the following conclusions:

- The disposal site, identified as RTN 3-2524 comprises approximately 36,000 square feet (0.83 acres) across 175 & 189 Intervale Street, the paper street, a portion of 500 Congress Street and a portion of 40 Vernon Street in Quincy, Massachusetts.
- Earliest obtainable records indicate that properties at 175 & 189 Intervale Street have been utilized as a junk yard and metal scrapping facility since the early 1940's.
- PDM Metals, Inc. occupied the Property beginning in June 1971 when the land was purchased by Henry P. Gregoire, Trustee of the Gregoire Family Trust. PDM Metals continued operations at the property until the mid-1990's when the Property was abandoned by the Gregoire Family Trust. The property was seized by the City via tax foreclosure in 2009 and has maintained the exempt status under M.G.L. 21E, Section 2.
- The Property was used by PDM Metals for auto salvage, metal scrapping, transformer cutting, manhole recoating and general materials storage. Improper procedures and mishandling of materials during these former operations are the sources of the conditions of OHM contamination at the Property.
- Potential conditions of OHM contamination were noted by MassDEP (formerly MassDEQE) in 1986, following a fire involving a 55-gallon drum of apparent waste solvent. Due to the length of operations occurring prior to and following the initial discovery of the contamination, it cannot be determined if releases may have occurred at different times, with different materials, and at different magnitudes.
- Hazardous materials left over from operations at the Property were collected, removed, and transported off-Property for disposal at an approved facility by the City in December 2012 and January 2013. All known sources of OHM have been removed or eliminated and historical operations and practices are no longer active at the Property.
- The former building was demolished in August/September 2013. During demolition activities, PCB-impacts building foundation and soil were encountered and a RAM Plan was prepared to remove the impacted foundation and soil in the top 3 feet to reduce site risks. The RAM was modified to conduct a bench-scale and pilot scale test to evaluate potential options to stabilize leachable lead and chlordane detected in disposal samples.
- During Phase II CSA activities, soil samples were collected from off-Property locations to better define the nature and extent of impacts from historical PDM, Inc. activities. Two off-property location (40 Vernon Street and 500 Congress Street) were approached by the City to collect samples under the Massachusetts Brownfields program. 120-day reporting conditions were identified at 40 Vernon Street and 500 Congress Street. The MassDEP was notified of the 120-day reporting conditions on May 20, 2014 (40 Vernon Street; RTN 3-32188) and September 18, 2014 (500 Congress Street; RTN 3-32443). During soil sampling activities in July 2014, an Imminent Hazard (IH) condition was identified on the 500 Congress Street property. The Trustees of the Medical Office Condominiums reported the IH condition to MassDEP on September 24, 2014 and MassDEP issued RTN 3-32452. The Trustees hired GZA to respond to the IH condition, which consisted on installing a temporary fence and plastic cover around the impacted area.
- PCBs, metals, and petroleum (EPH/VPH) and chlorinated VOCs were detected in disposal site soils. The majority of the contamination detected is related to the historic operations at the Property. Impacted soils are generally limited to the top 3 feet across the Property with a few exceptions where deeper impacts to the groundwater table were observed. The deepest impacts were identified in AOI #1 (former sump area; approximately 15 feet bgs) and AOI #2 (central yard area; greater than 7 feet bgs).

- Historical fill is present at depths ranging from existing grade to approximately 8 feet bgs at the disposal site. The underlying stratigraphy consists of interbedded sequences of dense silt, and coarse to fine sand, which generally grades toward more sand with depth. Organic peat was also observed in several of the soil borings throughout the Property at a depth of approximately 8-15 feet bgs.
- Groundwater is typically encountered at a depth of 5 to 12 feet bgs, with the depth varying seasonally and the locations of monitoring wells on top of the fill material that was located below the former building. Groundwater flow is generally towards the east and northeast in the approximate direction of Town Brook.
- Low concentrations of chlorinated solvents, cadmium, and zinc were detected in groundwater but are not expected to migrate off-Property at significant concentrations above applicable Method 1 RC standards.
- NAPL was not observed in any monitoring wells at the Property.
- The RC concluded that Method 1 RC standards and UCLs were exceeded in soil and/or groundwater. Therefore, this condition precludes the achievement of No Significant Risk to Human Health, Public Welfare, and the Environment at the disposal site.
- A condition of No Significant Risk to safety has been achieved at the disposal site.
- Additional Comprehensive Response Actions are required at this disposal site to achieve a Permanent Solution. A Phase III Remedial Action Plan was submitted concurrently with this Phase II CSA Report.

13. LIMITATIONS

The activities described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or limited is implied. These services were performed consistent with the agreement with our client. The conclusions presented in this Report were based upon the services described and not on scientific tasks or procedures beyond the scope of described services or time or budgetary constraints. Any statement or opinion contained in this report prepared by Woodard & Curran shall not be construed to create any warranty or representation that the property is free of pollution or complies with any or all applicable regulatory or statutory requirements; or that the property is fit for any particular purpose. Unless otherwise indicated in this Report, no attempt was made to check on the compliance of present or past owners of the site with federal, state, or local laws and regulations. Woodard & Curran Inc. shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld or not fully disclosed at the time the evaluation was performed.

Results of the activities contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, timeframes, and project parameters indicated. Woodard & Curran is not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others or the use of segregated portions of this report.

This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Table 1-1
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
On-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

[illegible]

Notes:

mg/kg = Milligrams per kilogram.

ft bgs = Feet below ground surface.

NA = No standard available.

Only constituents that have been detected at least once among relevant samples are presented.

* = The highest detected concentration between primary and field duplicate samples is presented

** = Constituent was analyzed via multiple methods. The highest detected concentration is presented

< = Constituent is not detected; value presented is the laboratory reporting limit (RL).

Data qualifiers presented in the "Qual" column are defined thus: A "U" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified as estimated. A plus (+) or minus (-) sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.

Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.

To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").

Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without

institutional controls (i.e., an Activity and Use Limitation).

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On-Property Soil EPCs (0-3' bgs)
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Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).

Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

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175 & 189 Intervale Street, Quincy, MA

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Only constituents that have been detected at least once among relevant samples are presented.
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Exposure Point Concentrations (EPCs) were calculated at least one time during assessment activities.

To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").

Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).

Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

Table 1-1
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
On-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

[illegible]

Notes:

mg/kg = Milligrams per kilogram.

ft bgs = Feet below ground surface.

NA = No standard available.

Only constituents that have been detected at least once among relevant samples are presented

^a = The highest detected concentration between primary and field duplicate samples is presented.

^a = Constituent was analyzed via multiple methods. The highest detected concentration is presented.^a = Constituent is not detected; value presented is the laboratory reporting limit (RL)

Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates the

result was qualified as estimated. A plus (+) or minus (-) sign indicates the direction of failure.

[illegible]

Exposure Point Concentrations (EPCs) were calculated based upon the average concentration of each chemical in the water column at least one time during assessment activities.

[illegible]

To calculate EFCs for results reported as non-detect, one-half of the RL was used as a maximum detected concentration (indicated by *NC*).

Method 1 C-1 Risk Characterization standards presented in this table are the most

institutional controls (i.e., an Activity and Use limitation)

Exposure Point Concentrations (EPCs) that exceed any of the applicable MCR I

_____ (_____) _____

ity of Quincy - Intemple (226222 01)

Table 1-1 thru 1-4 Soil & EPC

Table 1-1
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
On-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

[illegible]

Woodard & Curran
October 2014

Table 1-1
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
On-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

[illegible]

Notes:

mg/kg = Milligrams per kilogram.

ft bgs = Feet below ground surface.

NA = No standard available.

Only constituents that have been detected at least once among relevant samples are presented.

* = The highest detected concentration between primary and field duplicate samples is presented.

* = Constituent was analyzed via multiple methods. The highest detected concentration is presented.

< = Constituent is not detected; value presented is the laboratory reporting limit (RL).

Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected

result was qualified as estimated. A plus (+) or minus (-) sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.

Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.

To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").

Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without

Exposure Point Concentrations (EPCs) that exceed any of the applicable MGP Method 4 cell standards are shaded in yellow.

Table 1-1
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
On-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/13 Soil Standards						Maximum Detected Concentration (mg/Kg)	Exposure Point Concentration (mg/Kg)	S-23		S-25		S-26		S-27		S-30		S-31		S-33		S-37		S-38		S-39		S-40		S-45		S-47		S-49		S-52		S-53		S-54	
	S-1 & GW-2		S-1 & GW-3		S-2 & GW-2				S-2 & GW-3		7/28/2014 0-0.25		7/28/2014 0-0.25		7/28/2014 0-0.25		7/28/2014 0-0.25		7/28/2014 1-2		7/28/2014 0-0.25		7/28/2014 0-0.25		7/29/2014 0-0.25		7/29/2014 0-0.25		7/29/2014 0-0.25		7/29/2014 0-0.25		7/29/2014 0-0.25		7/29/2014 1-2		7/29/2014 0-0.25		7/29/2014 0-0.25			
	Result	Qual	Result	Qual	Result	Qual			Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
	UCL																																									
Volatile Organic Compounds (mg/Kg)																																										
1,2,3-Trichlorobenzene	NA	NA	NA	NA	NA	NA	0.0310	0.00332	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2,4-Trichlorobenzene	6	700	6	3,000	6	5,000	10,000	3.23	0.152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	0.0579	0.0163	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1,2-Dichlorobenzene	100	300	100	300	100	300	10,000	2.06	0.103	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA	0.0197	0.0036	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1,3-Dichlorobenzene	100	100	200	500	200	500	5,000	22.7	0.963	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1,4-Dichlorobenzene	1	80	1	400	1	2,000	10,000	1.21	0.0330	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
2-Butanone (MEK)	50	400	50	400	50	400	10,000	0.197	0.0030	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
1-Methyl-2-pentanone (MIBK)	50	400	50	400	50	400	10,000	0.0664	0.0184	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Xylene	50	400	50	400	50	400	10,000	0.207	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Benzene**	40	40	200	200	400	1,000	10,000	0.430	0.0366	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Bromomethane	0.5	30	0.5	30	0.5	30	6,000	0.0474	0.00577	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Carbon Disulfide	NA	NA	NA	NA	NA	NA	NA	0.00556	0.00181	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Chlorobenzene	3	100	3	100	3	100	10,000	95.0	3.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Chloromethane	NA	NA	NA	NA	NA	NA	NA	0.0632	0.00511	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
cis-1,2-Dichloroethylene	0.1	100	0.1	500	0.1	500	5,000	0.548	0.0387	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Dichlorodifluoromethane (Freon 12)	NA	NA	NA	NA	NA	NA	5,000	0.120	0.0272	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Ethylbenzene**	500	500	1,000	1,000	1,000	3,000	10,000	0.322	0.0382	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Isopropylbenzene (Cumene)	NA	NA	NA	NA	NA	NA	NA	0.0596	0.0135	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
m+p Xylene**	100	500	100	1,000	100	3,000	10,000	1.43	0.148	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Naphthalene**	20	500	20	1,000	20	3,000	10,000	11.2	0.766	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
n-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	0.124	0.0213	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--											

Notes:
mg/kg = Milligrams per kilogram.
ft bgs = Feet below ground surface.
NA = No standard available.

Only constituents that have been detected at least once among relevant samples are presented.

* = The highest detected concentration between primary and field duplicate samples is presented.

** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.

< = Constituent is not detected; value presented is the laboratory reporting limit (RL).

Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified as estimated. A plus (+) or minus (-) sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.

Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.

To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC*").

Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).

Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

Table 1-1
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
On-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	S-58		S-65			S-67			S-70			S-71			S-78			S-80			S-81			S-82		
	S-1 & GW-2		S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3			UCL	7/29/2014		7/29/2014		7/29/2014		7/29/2014		7/29/2014		7/29/2014		7/29/2014		7/29/2014		7/29/2014		7/29/2014		7/29/2014				
	Result	Qual	1/2 RL	Result	Qual	1/2 RL	Result				Qual	1/2 RL	Result	Qual	1/2 RL	Result	Qual	1/2 RL	Result	Qual	1/2 RL	Result	Qual	1/2 RL	Result	Qual	1/2 RL	Result	Qual	1/2 RL	Result	Qual	1/2 RL		
Volatile Organic Compounds (mg/Kg)																																			
1,2,3-Trichlorobenzene	NA	NA	NA	NA	NA	NA	NA	0.0310	0.00332	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
1,2,4-Trichlorobenzene	6	700	6	3,000	6	5,000	10,000	3.23	0.152	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	0.0579	0.0163	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
1,2-Dichlorobenzene	100	300	100	300	100	300	10,000	2.06	0.103	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	0.0197	0.0036	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
1,3-Dichlorobenzene	100	100	200	500	200	500	5,000	22.7	0.963	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
1,4-Dichlorobenzene	1	80	1	400	1	2,000	10,000	27.5	1.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
2-Butanone (MEK)	50	400	50	400	50	400	10,000	0.197	0.0330	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
4-Methyl-2-pentanone (MIBK)	50	400	50	400	50	400	10,000	0.0664	0.0184	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Acetone	50	400	50	400	50	400	10,000	0.207	0.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Benzene**	40	40	200	200	400	1,000	10,000	0.430	0.0368	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Bromomethane	0.5	30	0.5	30	0.5	30	6,000	0.0474	0.00577	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Carbon Disulfide	NA	NA	NA	NA	NA	NA	NA	0.0556	0.00181	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Chlorobenzene	3	100	3	100	3	100	10,000	95.0	0.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Chloromethane	NA	NA	NA	NA	NA	NA	NA	0.0532	0.00611	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
cis-1,2-Dichloroethylene	0.1	100	0.1	500	0.1	500	5,000	0.548	0.0387	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Dichlorodifluoromethane (Freon 12)	NA	NA	NA	NA	NA	NA	5,000	0.120	0.0272	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Ethylbenzene**	500	500	1,000	1,000	1,000	3,000	10,000	0.322	0.0382	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Isopropylbenzene (Cumene)	NA	NA	NA	NA	NA	NA	NA	0.0596	0.0135	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
m+p Xylene**	100	500	100	1,000	100	3,000	10,000	1.43	0.148	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Naphthalene**	20	500	20	1,000	20	3,000	10,000	11.2	0.766	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
n-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	0.124	0.0213	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
n-Propylbenzene	NA	NA	NA	NA	NA	NA	NA	0.136	0.0213	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
o-Xylene**	100	500	100	1,000	100	3,000	10,000	0.531	0.0411	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
p-Isopropyltoluene (p-Cymene)	NA	NA	NA	NA	NA	NA	NA	0.236	0.0262	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Styrene	4	70	4	300	4	2,000	10,000	1.87	0.119	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Tetrachloroethylene	10	30	10	200	10	1,000	10,000	3.94	0.297	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Tetrahydrofuran	NA	NA	NA	NA	NA	NA	NA	6.67	0.608	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Toluene**	500	500	1,000	1,000	2,000	3,000	10,000	1.11	0.102	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Trichloroethylene	0.3	30	0.3	60	0.3	60	600	0.402	0.0359	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Trichlorofluoromethane (Freon 11)	NA	NA	NA	NA	NA	NA	NA	0.090	0.0135	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Vinyl Chloride	0.7	1.0	0.7	7	0.7	60	600	0.0509	0.0085	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Volatile Petroleum Hydrocarbons (mg/kg)																																			
C5-C8 Aliphatics (adjusted)	100	100	500	500	500	500	5,000	79.8	5.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
C9-C12 Aliphatics (adjusted)	1,000	1,000	3,000	3,000	5,000	5,000	20,000	50.7	4.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
C9-C10 Aromatics	100	100	500	500	500	500	5,000	13.6	1.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Extractable Petroleum Hydrocarbons (mg/kg)																																			
C9-C18 Aliphatics	1,000	1,000	3,000	3,000	5,000	5,000	20,000	6,890	305	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
C18-C36 Aliphatics	3,000	3,000	5,000	5,000	5,000	5,000	20,000	9,730	612	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
C11-C22 Aromatics (Adjusted)	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1,870	188	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
2-Methylnaphthalene	80	300	80	500	80	500	5,000	0.632	0.250	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Acenaphthene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	0.211	0.155	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Acenaphthylene	600	10	600	10	600	10	10,000	0.354	0.264	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Anthracene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	0.686	0.293	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Benzo(a)anthracene	7	7	40	40	300	300	3,000	4.08	1.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Benzo(a)pyrene	2	2	7	7	30	30	300	5.20	1.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Benzo(b)fluoranthene	7	7	40	40	300	300	3,000	7.26	2.39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	3.77	1.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Benzo(k)fluoranthene	70	70	400	400	3,000	3,000	10,000	2.94	1.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Chrysene	70	70	400	400	3,000	3,000	10,000	6.32	1.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Dibenz(a,h)anthracene	0.7	0.7	4	4	30	30	300	2.06	0.908	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Fluoranthene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	10.6	2.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Fluorene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	0.375	0.239	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Indeno(1,2,3-cd)pyrene	7	7	40	40	300	300	3,000	3.92	1.35	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Phenanthrene	500	500	1,000	1,000	3,000	3,000	10,000	4.44	0.951	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Pyrene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	8.42	2.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--			
Polychlorinated Biphenyls (mg/kg)																																			
Aroclor-1242	1	1	4	4	4	4	100	2,300	22.3	< 0.337	--	0.1685	< 0.0348	--	0.0174	< 0.693	0.3465	< 0.175	--	0.0875	--	--	--	--	--	--	--	--	--	< 0.0336	--	0.0168	< 0.339	--	0.1695
Aroclor-1248	1	1	4	4	4	4	100	0.206	0.10	0.206	--	--	< 0.0348	--	0.0174	< 0.693	NC																		

Notes:

mg/kg = Milligrams per kilogram.

ft bgs = Feet below ground surface

NA = No standard available

Only constituents that have been detected at least once among relevant samples are presented

* = The highest detected concentration between primary and field duplicate samples is presented.

** = Constituent was analyzed via multiple methods. The highest detected concentration is presented

< = Constituent is not detected; value presented is the laboratory reporting limit (RL)

Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified as estimated. A plus (+) or minus (-) sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.

Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.

To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").

Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).

Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

Table 1-2
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
On-Property Soil EPCs (>3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCSB-1			WCSB-2			WCSB-3			WCSB-3			WCSB-4			WCSB-4			WCSB-5			WCSB-6			WCSB-6			WCSB-7			WCSB-7			WCSB-7			
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			9/26/2013			9/26/2013			9/26/2013			9/26/2013			9/26/2013			11/22/2013			9/25/2013			9/25/2013			9/25/2013			9/25/2013			11/22/2013						
										7-8			14-15			5-6			7-8			6-7			7-8			5-5			4-5			8-9			4-5			7-5-8			7-8			
										Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	
Volatile Organic Compounds																																														
1,2,4-Trichlorobenzene	6	700	6	3,000	6	5,000	10,000	2.45	0.210	< 0.00273	--	0.001365	< 0.108	--	0.054	< 0.00303	--	0.001515	--	--	--	< 0.00281	--	0.001405	--	--	--	2.45	--	--	< 0.00283	--	0.001415	< 0.00262	--	0.00131	< 0.00256	--	0.00128	< 0.00418	--	0.00209	--	--	--	
1,2-Dichlorobenzene	100	300	100	300	100	300	10,000	2.10	0.181	< 0.00273	--	0.001365	< 0.108	--	0.054	< 0.00303	--	0.001515	--	--	--	< 0.00281	--	0.001405	--	--	--	2.1	--	--	< 0.00283	--	0.001415	< 0.00262	--	0.00131	< 0.00256	--	0.00128	< 0.00418	--	0.00209	--	--	--	
1,3-Dichlorobenzene	100	100	200	500	200	500	5,000	15.8	1.32	< 0.00273	--	0.001365	0.0189	--	--	< 0.00303	--	0.001515	--	--	--	< 0.00281	--	0.001405	--	--	--	15.8	--	--	< 0.00283	--	0.001415	< 0.00262	--	0.00131	< 0.00256	--	0.00128	< 0.00418	--	0.00209	--	--	--	
1,4-Dichlorobenzene	1	80	1	400	1	2,000	10,000	24.2	2.02	< 0.00273	--	0.001365	< 0.108	--	0.054	< 0.00303	--	0.001515	--	--	--	< 0.00281	--	0.001405	--	--	--	24.2	--	--	< 0.00283	--	0.001415	< 0.00262	--	0.00131	< 0.00256	--	0.00128	< 0.00418	--	0.00209	--	--	--	
2-Butanone (MEK)	50	400	50	400	50	400	10,000	0.0403	0.0193	0.0286	J+	--	< 1.08	--	NC	< 0.0303	--	0.01515	--	--	--	< 0.0281	--	0.01405	--	--	--	< 13.7	--	NC	< 0.0283	--	0.01415	0.0204	--	--	< 0.0256	--	0.0128	< 0.0418	--	0.0209	--	--	--	
Acetone	50	400	50	400	50	400	10,000	0.167	0.0566	0.0965	--	--	< 10.8	--	NC	0.00815	--	--	--	--	--	0.0966	--	--	--	--	--	< 137	--	NC	0.0219	--	--	0.0704	--	--	0.00914	--	--	0.075	--	--	--	--		
Benzene**	40	40	200	200	400	1,000	10,000	0.526	0.0473	0.00156	--	--	0.012	--	--	< 0.00303	--	0.001515	--	0.0616	--	--	--	< 0.00281	--	0.001405	--	--	0.526	--	--	< 0.00283	--	0.001415	0.00268	--	--	< 0.00256	--	0.00128	< 0.00418	--	0.00209	--	--	--
Carbon Disulfide	NA	NA	NA	NA	NA	NA	NA	0.0241	0.00583	0.00822	--	--	< 0.108	--	NC	< 0.00303	--	0.001515	--	--	--	< 0.00281	--	0.001405	--	--	--	< 1.37	--	NC	< 0.00283	--	0.001415	0.00563	--	--	< 0.00256	--	0.00128	0.00834	--	--	--	--		
Chlorobenzene	3	100	3	100	3	100	10,000	105	8.76	< 0.00273	--	0.001365	< 0.108	--	0.054	< 0.00303	--	0.001515	--	--	--	0.00449	--	--	--	--	105	--	--	< 0.00283	--	0.001415	< 0.00262	--	0.00131	< 0.00256	--	0.00128	< 0.00418	--	0.00209	--	--	--		
cis-1,2-Dichloroethylene	0.1	100	0.1	500	0.1	500	5,000	0.000817	0.000817	< 0.00273	--	NC	< 0.108	--	NC	< 0.00303	--	NC	--	--	--	0.000817	--	--	--	--	< 1.37	--	NC	< 0.00283	--	NC	< 0.00262	--	NC	< 0.00256	--	NC	< 0.00418	--	NC	--	--	--		
Ethylbenzene**	500	500	1,000	1,000	1,000	3,000	10,000	0.0281	0.00376	0.000546	--	--	< 0.108	--	NC	< 0.00303	--	0.001515	--	0.0281	--	--	< 0.00281	--	0.001405	--	--	< 1.37	--	NC	< 0.00283	--	0.001415	0.00115	--	--	< 0.00256	--	0.00128	< 0.00418	--	0.00209	--	--	--	
m+p Xylene**	100	500	100	1,000	100	3,000	10,000	0.00581	0.00321	< 0.00545	--	--	< 0.216	--	NC	< 0.00606	--	0.00303	--	< 0.202	--	NC	< 0.00562	--	0.00281	--	--	< 2.74	--	NC	< 0.00566	--	0.00283	< 0.00525	--	0.002625	< 0.00512	--	0.00256	< 0.00836	--	0.00418	--	--	--	
Methyl tert-Butyl Ether (MTBE)**	100	100	100	500	100	500	5,000	0.00268	0.00157	< 0.00273	--	0.001365	< 0.108	--	NC	< 0.00303	--	0.001515	--	< 0.101	--	NC	< 0.00281	--	0.001405	--	--	< 1.37	--	NC	< 0.00283	--	0.001415	< 0.00262	--	0.00131	< 0.00256	--	0.00128	< 0.00418	--	0.00209	--	--	--	
Naphthalene**	20	500	20	1,000	20	3,000	10,000	1.16	0.228	0.00993	--	--	< 1.08	--	0.54	0.0486	--	--	--	0.107	--	--	< 0.0281	--	0.01405	--	--	1.16	--	--	< 0.0283	--	0.01415	< 0.0262	--	0.0131	< 0.0256	--	0.0128	< 0.0418	--	0.0209	--	--	--	
o-Xylene**	100	500	100	1,000	100	3,000	10,000	0.00244	0.00159	< 0.00273	--	0.001365	< 0.108	--	NC	< 0.00303	--	0.001515	--	< 0.101	--	NC	< 0.00281	--	0.001405	--	--	< 1.37	--	NC	< 0.00283	--	0.001415	< 0.00262	--	0.00131	< 0.00256	--	0.00128	< 0.00418	--	0.00209	--	--	--	
p-Isopropyltoluene (p-Cymene)	NA	NA	NA	NA	NA	NA	NA	0.00369	0.00167	< 0.00273	--	0.001365	< 0.108	--	NC	0.00369	--	--	--	--	--	< 0.00281	--	0.001405	--	--	--	< 1.37	--	NC	< 0.00283	--	0.001415	< 0.00262	--	0.00131	< 0.00256	--	0.00128	< 0.00418	--	0.00209	--	--	--	
Tetrachloroethylene	10	30	10	200	10	1,000	10,000	0.0266	0.00512	< 0.00273	--	0.001365	< 0.108	--	NC	0.00373	--	--	--	--	--	< 0.00281	--	0.001405	--	--	--	< 1.37	--	NC	< 0.00283	--	0.001415	< 0.00262	--	0.00131	0.0102	--	--	< 0.00418	--	0.00209	--	--	--	
Toluene**	500	500	1,000	1,000	2,000	3,000	10,000	0.0306	0.00514	0.00147	--	--	< 0.108	--	NC	< 0.00303	--	0.001515	--	0.0306	--	--	< 0.00281	--	0.001405	--	--	< 1.37	--	NC	< 0.00283	--	0.001415	0.00326	--	--	< 0.00256	--	0.00128	< 0.00418	--	0.00209	--	--	--	
Trichloroethylene	0.3	30	0.3	60	0.3	60	600	0.00206	0.00149	< 0.00273	--	0.001365	< 0.108	--	NC	< 0.00303	--	0.001515	--	--	--	< 0.00281	--	0.001405	--	--	--	< 1.37	--	NC	< 0.00283	--	0.001415	< 0.00262	--	0.00131	< 0.00256	--	0.00128	< 0.00418	--	NC	--	--	--	
Volatile Petroleum Hydrocarbons (mg/kg)																																														
C5-C8 Aliphatics (adjusted)	100	100	500	500	500	500	5,000	2.27	1.09	--	--	--	--	--	--	--	--	--	--	1.2	--	--	--	--	--	--	--	1.48	--	--	--	--	--	--	2.27	--	--	0.0523	--	--	--	--	--			
C9-C12 Aliphatics (adjusted)	1,000	1,000	3,000	3,000	5,000	5,000	20,000	0.733	0.270	--	--	--	--	--	--	--	--	--	--	< 0.344	--	0.172	--	--	--	--	--	< 33.9	--	NC	--	--	--	0.0351	--	--	< 0.283	--	0.1415	--	--	--	--	--		
C9-C10 Aromatics	100	100	500	500	500	500	5,000	33.1	6.96	--	--	--	--	--	--	--	--	--	--	1.12	--	--	--	--	--	--	--	33.1	--	--	--	--	--	0.251	--	--	0.0362	--	--	--	--	--	--			
Extractable Petroleum Hydrocarbons (mg/kg)																																														
C9-C18 Aliphatics	1,000	1,000	3,000	3,000	5,000	5,000	20,000	2,390	265	< 6.4	--	3.2	--	--	--	--	--	--	--	< 6.52	--	3.26	--	--	--	--	--	2390	--	--	--	--	--	--	< 6.13	--	3.065	< 5.34	--	2.67	--	--	--	--		
C19-C36 Aliphatics	3,000	3,000	5,000	5,000	5,000	5,000	20,000	3,230	366	< 6.4	--	3.2	--	--	--	--	--	--	--	12.7	--	--	--	--	--	--	--	3230	--	--	--	--	--	--	5.49	--	--	4.91	--	--	--	--	--			
C11-C22 Aromatics (Adjusted)	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1,150	186	21.5	--	--	--	--	--	--	--	--	--	< 6.88	--	3.44	--	--	--	--	--	1150	--	--	--	--	--	--	< 6.35	--	3.175	< 5.65	--	2.625	--	--	--	--		
2-Methylnaphthalene	80	300	80	500	80	500	5,000	4.50	1.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--				
Acenaphthene	1,000	1,000	3,000	3,000	5,000	5,000																																								

Table 1-2
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
On-Property Soil EPCs (>3' bgs)
175 & 189 Intervale Street, Quincy, MA

[illegible]

Notes:

mg/kg = Milligrams per kilogram.

ft bgs = Feet below ground surface.

NA = No standard available.

Only constituents that have been detected at least once among relevant samples are presented.

* = The highest detected concentration between primary and field duplicate samples is presented

** = Constituent was analyzed via multiple methods. The highest detected concentration is presented

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Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).

Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

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On-Property Soil EPCs (>3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	S-16			S-17			S-17			S-18			S-18			S-19			S-19			S-20			S-20			S-21			S-21			S-22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			7/28/2014			7/28/2014			7/28/2014			7/28/2014			7/28/2014			7/28/2014			7/28/2014			7/28/2014			7/28/2014			7/28/2014			7/28/2014																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Table 1-2
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
On-Property Soil EPCs (>3' bgs)
175 & 189 Intervale Street, Quincy, MA

[illegible]

Notes:

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Only constituents that have

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Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	S-36			S-36			S-37			S-37			S-38			S-39			S-39			S-40			S-40			S-41			S-41			S-42		
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			7/29/2014			7/29/2014			7/29/2014			7/29/2014			7/29/2014			7/29/2014			7/29/2014			7/29/2014			7/29/2014			7/29/2014			7/29/2014					
										3-4*			6-7			3-4			6-7			3-4			6-7			3-4			6-7			3-4			6-7			3-4			6-7		
										Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL
Volatile Organic Compounds																																													
1,2,4-Trichlorobenzene	6	700	6	3,000	6	5,000	10,000	2.45	0.210	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
1,2-Dichlorobenzene	100	300	100	300	100	300	10,000	2.10	0.181	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
1,3-Dichlorobenzene	100	100	200	500	200	500	5,000	15.8	1.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
1,4-Dichlorobenzene	1	80	1	400	1	2,000	10,000	24.2	2.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
2-Butanone (MEK)	50	400	50	400	50	400	10,000	0.0403	0.0193	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
Acetone	50	400	50	400	50	400	10,000	0.167	0.0566	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
Benzene**	40	40	200	200	400	1,000	10,000	0.528	0.0473	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
Carbon Disulfide	NA	NA	NA	NA	NA	NA	NA	0.0241	0.00583	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
Chlorobenzene	3	100	3	100	3	100	10,000	105	8.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
cis-1,2-Dichloroethylene	0.1	100	0.1	500	0.1	500	5,000	0.000817	0.000817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
Ethylbenzene**	500	500	1,000	1,000	1,000	3,000	10,000	0.0281	0.00376	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
m+p Xylene**	100	500	100	1,000	100	3,000	10,000	0.00581	0.00321	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
Methyl tert-Butyl Ether (MTBE)**	100	100	100	500	100	500	5,000	0.00288	0.00157	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
Naphthalene**	20	500	20	1,000	20	3,000	10,000	1.16	0.228	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
o-Xylene**	100	500	100	1,000	100	3,000	10,000	0.00244	0.00159	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
p-Isopropyltoluene (p-Cymene)	NA	NA	NA	NA	NA	NA	NA	0.00369	0.00167	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
Tetrachloroethylene	10	30	10	200	10	1,000	10,000	0.0266	0.00512	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
Toluene**	500	500	1,000	1,000	2,000	3,000	10,000	0.0306	0.00514	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
Trichloroethylene	0.3	30	0.3	60	0.3	60	600	0.00206	0.00149	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
Volatile Petroleum Hydrocarbons (mg/kg)																																													
C5-C8 Aliphatics (adjusted)	100	100	500	500	500	500	5,000	2.27	1.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
C9-C12 Aliphatics (adjusted)	1,000	1,000	3,000	3,000	5,000	5,000	20,000	0.733	0.270	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
C9-C10 Aromatics	100	100	500	500	500	500	5,000	33.1	6.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--						
Extractable Petroleum Hydrocarbons (mg/kg)																																													
C9-C18 Aliphatics	1,000	1,000	3,000	3,000	5,000	5,000	20,000	2.390	265	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
C19-C36 Aliphatics	3,000	3,000	5,000	5,000	5,000	5,000	20,000	3.230	366	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
C11-C22 Aromatics (Adjusted)	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1.150	186	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
2-Methylnaphthalene	80	300	80	500	80	500	5,000	4.50	1.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Acenaphthene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	3.86	1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Acenaphthylene	600	10	600	10	600	10	10,000	3.90	1.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Anthracene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	7.75	2.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Benzo(a)anthracene	7	7	40	40	300	300	3,000	7.27	2.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Benzo(a)pyrene	2	2	7	7	30	30	300	5.81	2.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Benzo(b)fluoranthene	7	7	40	40	300	300	3,000	6.40	2.33	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	2.38	1.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Benzo(k)fluoranthene	70	70	400	400	3,000	3,000	10,000	4.12	1.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Chrysene	70	70	400	400	3,000	3,000	10,000	10.3	3.69	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Dibenz(a,h)anthracene	0.7	0.7	4	4	30	30	300	2.18	0.983	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Fluoranthene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	18.7	6.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Fluorene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	7.08	2.62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Indeno(1,2,3-cd)pyrene	7	7	40	40	300	300	3,000	2.70	1.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Phenanthrene	500	500	1,000	1,000	3,000	3,000	10,000	16.2	5.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Pyrene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12.6	4.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--							
Polychlorinated Biphenyls (mg/kg)																																													
Aroclor-1242	1	1	4	4	4	4	100	36.2	0.521	< 0.0405	--	0.02025	0.0377	--	--	< 0.0388	--	0.0194	< 0.0694	--	0.0347	< 0.0381	--	0.01905	< 0.0352	--	0.0176	< 0.0386	--	0.0193	< 0.0356	--	0.0178	< 0.0443	--	0.02215	< 6.98	--	3.49	< 0.0351	--	0.01755	< 0.181	--	0.0905
Aroclor-1248	1	1	4	4	4	4	100	0.0914	0.0238	< 0.0405	--	0.02025	< 0.0388	--	0.0224	< 0.0388	--	0.0194	< 0.0694	--	0.0347	< 0.0381	--	0.01905	< 0.0352	--	0.0176	< 0.0386	--	0.0193	< 0.0356	--	0.0178	< 0.0443	--	0.02215	< 6.98	--	NC	< 0.0351	--	0.01755	< 0.181	--	0.0905
Aroclor-1254	1	1	4	4	4	4	100	33.4	2.48	< 0.0405	--	0.02025	< 0.0448	--	0.0224	< 0.0388	--	0.0194	< 0.0694	--	0.0347	< 0.0381	--	0.01905	< 0.0352	--	0.0176	< 0.0386	--	0.0193	< 0.0356	--	0.0178	< 0.0443	--	0.02215	< 6.98	--	3.49	< 0.0351	--	0.01755	< 0.181	--	0.0905
Aroclor-1260	1	1	4	4	4	4	100	195	2.14	0.00811	J+	--	0.																																

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	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			7/30/2014			7/30/2014			7/30/2014			7/30/2014			7/29/2014			7/29/2014			7/29/2014			7/29/2014			7/30/2014			7/30/2014			7/30/2014			7/30/2014																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
										3-4			6-7			3-4			6-7			3-4			6-7			3-4*			6-7			7/30/2014			6-7			3-4			6-7			3-4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Volatile Organic Compounds										--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

Table 1-2
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
On-Property Soil EPCs (>3' bgs)
175 & 189 Intervale Street, Quincy, MA

[illegible]

Notes:

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Table 1-2
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
On-Property Soil EPCs (>3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	S-68			S-69			S-69			S-70			S-70			S-71			S-71			S-72			S-72			S-73			S-73			S-74			
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			7/30/2014			7/30/2014			7/30/2014			7/29/2014			7/29/2014			7/29/2014			7/29/2014			7/31/2014			7/31/2014			7/31/2014			7/31/2014						
										Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	
Volatile Organic Compounds																																														
1,2,4-Trichlorobenzene	6	700	6	3,000	6	5,000	10,000	2.45	0.210	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
1,2-Dichlorobenzene	100	300	100	300	100	300	10,000	2.10	0.181	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
1,3-Dichlorobenzene	100	100	200	500	200	500	5,000	15.8	1.32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
1,4-Dichlorobenzene	1	80	1	400	1	2,000	10,000	24.2	2.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
2-Butanone (MEK)	50	400	50	400	50	400	10,000	0.0403	0.0193	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Acetone	50	400	50	400	50	400	10,000	0.167	0.0566	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Benzene**	40	40	200	200	400	1,000	10,000	0.526	0.0473	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Carbon Disulfide	NA	NA	NA	NA	NA	NA	NA	0.0247	0.00583	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Chlorobenzene	3	100	3	100	3	100	10,000	105	8.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
cis-1,2-Dichloroethylene	0.1	100	0.1	500	0.1	500	5,000	0.000817	0.000817	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Ethylbenzene**	500	500	1,000	1,000	1,000	3,000	10,000	0.0281	0.00376	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
m-p Xylene**	100	500	100	1,000	100	3,000	10,000	0.00581	0.00321	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Methyl tert-Butyl Ether (MTBE)**	100	10																																												

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Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

Table 1-2
Summary of Constituents Detected and Method 1 Risk Characterization for Soils
On-Property Soil EPCs (>3' bgs)
175 & 189 Intervale Street, Quincy, MA

[illegible]

Notes:
mg/kg = Milligrams per kilogram.
ft bgs = Feet below ground surface.
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Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified as estimated. A plus (+) or minus (-) sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.

Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.

To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detectable concentration (indicated by "NC").

Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).

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Table 1-2
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
On-Property Soil EPCs (>3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	S-82			S-82		
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			7/29/2014			7/29/2014		
										3-4			6-7		
										Result	Qual.	1/2 RL	Result	Qual	1/2 RL
Volatile Organic Compounds															
1,2,4-Trichlorobenzene	6	700	6	3,000	6	5,000	10,000	2.45	0.210	--	--	--	--	--	--
1,2-Dichlorobenzene	100	300	100	300	100	300	10,000	2.10	0.181	--	--	--	--	--	--
1,3-Dichlorobenzene	100	100	200	500	200	500	5,000	15.8	1.32	--	--	--	--	--	--
1,4-Dichlorobenzene	1	80	1	400	1	2,000	10,000	24.2	2.02	--	--	--	--	--	--
2-Butanone (MEK)	50	400	50	400	50	400	10,000	0.0403	0.0193	--	--	--	--	--	--
Acetone	50	400	50	400	50	400	10,000	0.167	0.0566	--	--	--	--	--	--
Benzene**	40	40	200	200	400	1,000	10,000	0.526	0.0473	--	--	--	--	--	--
Carbon Disulfide	NA	NA	NA	NA	NA	NA	NA	0.0241	0.00583	--	--	--	--	--	--
Chlorobenzene	3	100	3	100	3	100	10,000	105	8.76	--	--	--	--	--	--
cis-1,2-Dichloroethylene	0.1	100	0.1	500	0.1	500	5,000	0.000817	0.000817	--	--	--	--	--	--
Ethylbenzene**	500	500	1,000	1,000	1,000	3,000	10,000	0.0281	0.00376	--	--	--	--	--	--
m+p Xylene**	100	500	100	1,000	100	3,000	10,000	0.00581	0.00321	--	--	--	--	--	--
Methyl tert-Butyl Ether (MTBE)**	100	100	100	500	100	500	5,000	0.00268	0.00157	--	--	--	--	--	--
Naphthalene**	20	500	20	1,000	20	3,000	10,000	1.16	0.228	--	--	--	--	--	--
o-Xylene**	100	500	100	1,000	100	3,000	10,000	0.00244	0.00159	--	--	--	--	--	--
p-Isopropyltoluene (p-Cymene)	NA	NA	NA	NA	NA	NA	NA	0.00369	0.00167	--	--	--	--	--	--
Tetrachloroethylene	10	30	10	200	10	1,000	10,000	0.0266	0.00512	--	--	--	--	--	--
Toluene**	500	500	1,000	1,000	2,000	3,000	10,000	0.0306	0.00514	--	--	--	--	--	--
Trichloroethylene	0.3	30	0.3	60	0.3	60	600	0.00206	0.00149	--	--	--	--	--	--
Volatile Petroleum Hydrocarbons (mg/kg)															
C5-C8 Aliphatics (adjusted)	100	100	500	500	500	500	5,000	2.27	1.09	--	--	--	--	--	--
C9-C12 Aliphatics (adjusted)	1,000	1,000	3,000	3,000	5,000	5,000	20,000	0.733	0.270	--	--	--	--	--	--
C9-C10 Aromatics	100	100	500	500	500	500	5,000	33.1	6.96	--	--	--	--	--	--
Extractable Petroleum Hydrocarbons (mg/kg)															
C9-C18 Aliphatics	1,000	1,000	3,000	3,000	5,000	5,000	20,000	2.390	265	--	--	--	--	--	--
C19-C36 Aliphatics	3,000	3,000	5,000	5,000	5,000	5,000	20,000	3.230	366	--	--	--	--	--	--
C11-C22 Aromatics (Adjusted)	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1.150	186	--	--	--	--	--	--
2-Methylnaphthalene	80	300	80	500	80	500	5,000	4.50	1.67	--	--	--	--	--	--
Acenaphthene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	3.86	1.54	--	--	--	--	--	--
Acenaphthylene	600	10	600	10	600	10	10,000	3.90	1.56	--	--	--	--	--	--
Anthracene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	7.75	2.75	--	--	--	--	--	--
Benzo(a)anthracene	7	7	40	40	300	300	3,000	7.27	2.68	--	--	--	--	--	--
Benzo(a)pyrene	2	2	7	7	30	30	300	5.81	2.16	--	--	--	--	--	--
Benzo(b)fluoranthene	7	7	40	40	300	300	3,000	6.40	2.33	--	--	--	--	--	--
Benzo(g,h,i)perylene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	2.38	1.05	--	--	--	--	--	--
Benzo(k)fluoranthene	70	70	400	400	3,000	3,000	10,000	4.12	1.63	--	--	--	--	--	--
Chrysene	70	70	400	400	3,000	3,000	10,000	10.3	3.69	--	--	--	--	--	--
Dibenz(a,h)anthracene	0.7	0.7	4	4	30	30	300	2.18	0.983	--	--	--	--	--	--
Fluoranthene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	18.7	6.5	--	--	--	--	--	--
Fluorene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	7.08	2.62	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	7	7	40	40	300	300	3,000	2.70	1.16	--	--	--	--	--	--
Phenanthrene	500	500	1,000	1,000	3,000	3,000	10,000	16.2	5.74	--	--	--	--	--	--
Pyrene	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12.6	4.50	--	--	--	--	--	--
Polychlorinated Biphenyls (mg/kg)															
Aroclor-1242	1	1	4	4	4	4	100	36.2	0.521	< 0.0351	--	0.01755	< 0.0355	--	0.01775
Aroclor-1248	1	1	4	4	4	4	100	0.0914	0.0238	< 0.0351	--	0.01755	< 0.0355	--	0.01775
Aroclor-1254	1	1	4	4	4	4	100	33.4	0.448	< 0.0351	--	0.01755	< 0.0355	--	0.01775
Aroclor-1260	1	1	4	4	4	4	100	195	2.14	< 0.0351	--	0.01755	< 0.0355	--	0.01775
Total PCBs	1	1	4	4	4	4	100	195	4.01	ND	--	--	ND	--	--
Metals (mg/kg)															
Antimony	20	20	30	30	30	30	300	18.8	2.10	--	--	--	--	--	--
Arsenic	20	20	20	20	50	50	500	65.3	5.48	--	--	--	--	--	--
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1,390	64.9	--	--	--	--	--	--
Beryllium	90	90	200	200	200	200	2,000	2.48	0.494	--	--	--	--	--	--
Cadmium	70	70	60	60	60	60	1,000	406	14.4	--	--	--	--	--	--
Chromium	100	100	200	200	200	200	2,000	303	19.8	--	--	--	--	--	--
Lead	200	200	600	600	600	600	6,000	2,490	234	--	--	--	--	--	--
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	902	44.3	--	--	--	--	--	--
Selenium	400	400	700	700	700	700	7,000	2.05	0.459	--	--	--	--	--	--
Silver	100	100	200	200	200	200	2,000	26.9	1.25	--	--	--	--	--	--
Vanadium	400	400	40	40	50	50	7,000	526	28.8	--	--	--	--	--	--
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	13,800	854	--	--	--	--	--	--
Mercury	20	20	30	30	30	30	300	15.8	0.658	--	--	--	--	--	--

Notes:
mg/kg = Milligrams per kilogram.
ft bgs = Feet below ground surface.
NA = No standard available.
Only constituents that have been detected at least once among relevant samples are presented.
* = The highest detected concentration between primary and field duplicate samples is presented.
** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.
< = Constituent is not detected; value presented is the laboratory reporting limit (RL).
Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified as estimated. A plus (+) or minus (-) sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.
Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.
To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").
Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).
Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

Table 1-3
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCVS-1			WCVS-1			WCVS-2			WCVS-2		
										5/12/2014			5/12/2014			5/12/2014			5/12/2014		
										0-0.25*			2.5-3			0-0.25			2.5-3*		
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL
Polychlorinated Biphenyls (mg/kg)																					
Aroclor-1242	1	1	4	4	4	4	100	0.210	0.0639	< 0.183	--	0.0915	< 0.39	--	0.195	< 0.0342	--	0.0171	< 0.176	--	0.088
Aroclor-1248	1	1	4	4	4	4	100	2.50	0.281	< 0.183	--	0.0915	< 0.39	--	0.195	< 0.0342	--	0.0171	< 0.176	--	0.088
Aroclor-1254	1	1	4	4	4	4	100	4.53	0.44	< 0.183	--	0.0915	< 0.39	--	0.195	< 0.0342	--	0.0171	< 0.176	--	0.088
Aroclor-1260	1	1	4	4	4	4	100	33.4	2.39	0.793	--	--	< 0.39	--	0.195	0.0488	--	--	< 0.176	--	0.088
Total PCBs	1	1	4	4	4	4	100	33.4	2.71	0.793	--	--	ND	--	--	0.0488	--	--	ND	--	--
Metals (mg/kg)																					
Antimony	20	20	30	30	30	30	300	80.0	9.27	1.89	--	--	< 0.593	--	0.2965	< 0.578	--	0.289	< 0.528	--	0.264
Arsenic	20	20	20	20	50	50	500	16.7	6.97	16.7	--	--	7.2	--	--	9.59	--	--	9.03	--	--
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	513	107	46.1	--	--	128	--	--	31	--	--	54	--	--
Beryllium	90	90	200	200	200	200	2,000	1.16	0.533	0.342	--	--	0.349	--	--	0.351	--	--	0.52	--	--
Cadmium	70	70	60	60	60	60	1,000	13.5	3.62	1.69	--	--	1.81	--	--	0.45	--	--	0.577	--	--
Chromium	100	100	200	200	200	200	2,000	129	27.3	20.3	--	--	9.12	--	--	11.9	--	--	8.6	--	--
Lead	200	200	600	600	600	600	6,000	4,290	671	162	J-	--	270	J-	--	28.4	J-	--	214	J-	--
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	1,350	89.7	17	--	--	11	--	--	14.7	--	--	10.3	--	--
Selenium	400	400	700	700	700	700	7,000	3.75	0.643	1.09	--	--	< 0.593	--	0.2965	< 0.578	--	0.289	< 0.528	--	0.264
Silver	100	100	200	200	200	200	2,000	6.52	0.830	< 0.586	--	0.293	< 0.593	--	0.2965	< 0.578	--	0.289	< 0.528	--	0.264
Vanadium	400	400	40	40	50	50	7,000	45.4	18.9	12.9	--	--	28.5	--	--	9.03	--	--	27	--	--
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,800	1,329	679	--	--	665	--	--	73	--	--	120	--	--
Mercury	20	20	30	30	30	30	300	2.74	0.815	0.0892	--	--	0.248	--	--	< 0.106	--	0.053	0.143	--	--

Notes:
mg/kg = Milligrams per kilogram.
ft bgs = Feet below ground surface.
NA = No standard available.
Only constituents that have been detected at least once among relevant samples are presented.
* = The highest detected concentration between primary and field duplicate samples is presented.
** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.
< = Constituent is not detected; value presented is the laboratory reporting limit (RL).
Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.as estimated. A plus (+) or minus (-)
Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.
To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").
Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).
Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.
samples were not used in the EPC calculation because they are not located within the disposal site boundary.

Table 1-3
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-1			WCCS-1			WCCS-2			WCCS-2					
										5/12/2014			5/12/2014			5/12/2014			5/12/2014					
										0.25-0.5			2.5-2.75			0.5-0.75			1.5-1.75					
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL			
Polychlorinated Biphenyls (mg/kg)																								
Aroclor-1242	1	1	4	4	4	4	100	0.210	0.0639	< 0.215	--	0.1075	< 0.906	--	NC	< 0.0865	--	0.04325	< 0.687	--	NC			
Aroclor-1248	1	1	4	4	4	4	100	2.50	0.281	< 0.215	--	0.1075	< 0.906	--	0.453	< 0.0865	--	0.04325	< 0.687	--	0.3435			
Aroclor-1254	1	1	4	4	4	4	100	4.53	0.44	< 0.215	--	0.1075	4.53	J	--	< 0.0865	--	0.04325	< 0.687	--	0.3435			
Aroclor-1260	1	1	4	4	4	4	100	33.4	2.39	< 0.215	--	0.1075	< 0.906	--	0.453	0.0827	J	--	2.21	J	--			
Total PCBs	1	1	4	4	4	4	100	33.4	2.71	ND	--	--	4.53	--	--	0.0827	--	--	2.21	--	--			
Metals (mg/kg)																								
Antimony	20	20	30	30	30	30	300	80.0	9.27	< 0.56	--	0.28	1.64	--	--	< 0.565	--	0.2825	23.4	--	--			
Arsenic	20	20	20	20	50	50	500	16.7	6.97	2.37	--	--	9.41	--	--	3.44	--	--	4.54	--	--			
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	513	107	19.4	--	--	260	--	--	38.6	--	--	68.6	--	--			
Beryllium	90	90	200	200	200	200	2,000	1.16	0.533	0.216	--	--	0.518	--	--	0.295	--	--	0.392	--	--			
Cadmium	70	70	60	60	60	60	1,000	13.5	3.62	0.233	--	--	8.82	--	--	0.913	--	--	2.62	--	--			
Chromium	100	100	200	200	200	200	2,000	129	27.3	6.19	--	--	40.6	--	--	5.51	--	--	11.1	--	--			
Lead	200	200	600	600	600	600	6,000	4,290	671	20.7	--	--	589	--	--	44.4	--	--	1080	--	--			
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	1,350	89.7	4.93	--	--	1350	--	--	5.77	--	--	14.2	--	--			
Selenium	400	400	700	700	700	700	7,000	3.75	0.643	< 0.56	--	0.28	0.99	--	--	0.484	--	--	< 0.605	--	0.3025			
Silver	100	100	200	200	200	200	2,000	6.52	0.830	< 0.56	--	0.28	0.716	--	--	< 0.565	--	0.2825	< 0.605	--	0.3025			
Vanadium	400	400	40	40	50	50	7,000	45.4	18.9	8.79	J-	--	14.1	J-	--	8.66	J-	--	11.3	J-	--			
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,800	1,329	48.5	--	--	1740	--	--	140	--	--	386	--	--			
Mercury	20	20	30	30	30	30	300	2.74	0.815	0.0527	J+	--	0.996	J+	--	0.058	J+	--	0.315	J+	--			

Notes:
mg/kg = Milligrams per kilogram.
ft bgs = Feet below ground surface.
NA = No standard available.
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samples were not used in the EPC calculation because they are not located within the disposal site boundary.

Table 1-3
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-3			WCCS-3			WCCS-4			WCCS-4		
										5/12/2014			5/12/2014			5/12/2014			5/12/2014		
										0.25-0.5			2.0-2.25			0.75-1*			1.5-1.75		
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL
Polychlorinated Biphenyls (mg/kg)																					
Aroclor-1242	1	1	4	4	4	4	100	0.210	0.0639	< 0.0584	--	0.0292	< 0.368	--	0.184	< 0.0354	--	0.0177	< 0.195	--	0.0975
Aroclor-1248	1	1	4	4	4	4	100	2.50	0.281	< 0.0584	--	0.0292	< 0.368	--	0.184	< 0.0354	--	0.0177	< 0.195	--	0.0975
Aroclor-1254	1	1	4	4	4	4	100	4.53	0.44	< 0.0584	--	0.0292	< 0.368	--	0.184	< 0.0354	--	0.0177	< 0.195	--	0.0975
Aroclor-1260	1	1	4	4	4	4	100	33.4	2.39	0.0356	--	--	3.54	J	--	0.139	J	--	0.704	J	--
Total PCBs	1	1	4	4	4	4	100	33.4	2.71	0.0356	--	--	3.54	--	--	0.139	--	--	0.704	--	--
Metals (mg/kg)																					
Antimony	20	20	30	30	30	30	300	80.0	9.27	< 0.502	--	0.251	1.01	--	--	0.523	J-	--	3.89	J-	--
Arsenic	20	20	20	20	50	50	500	16.7	6.97	2.46	--	--	8.33	--	--	3.94	--	--	8.8	--	--
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	513	107	15.1	--	--	281	--	--	41.8	J+	--	162	J+	--
Beryllium	90	90	200	200	200	200	2,000	1.16	0.533	0.245	--	--	0.409	--	--	0.583	--	--	0.446	--	--
Cadmium	70	70	60	60	60	60	1,000	13.5	3.62	0.267	--	--	4.91	--	--	1.14	--	--	8.48	--	--
Chromium	100	100	200	200	200	200	2,000	129	27.3	6.18	--	--	25.4	--	--	10.4	J-	--	30.8	J-	--
Lead	200	200	600	600	600	600	6,000	4,290	671	17	--	--	417	--	--	133	J+	--	581	J+	--
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	1,350	89.7	4.81	--	--	245	--	--	9.58	--	--	60.3	--	--
Selenium	400	400	700	700	700	700	7,000	3.75	0.643	< 0.502	--	0.251	< 0.607	--	0.3035	< 0.529	--	0.2645	< 0.594	--	0.297
Silver	100	100	200	200	200	200	2,000	6.52	0.830	< 0.502	--	0.251	1.01	--	--	< 0.529	--	0.2645	< 0.594	--	0.297
Vanadium	400	400	40	40	50	50	7,000	45.4	18.9	7.68	J-	--	19.3	J-	--	14.3	--	--	16.3	--	--
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,800	1,329	71.9	--	--	12800	--	--	242	--	--	1510	--	--
Mercury	20	20	30	30	30	30	300	2.74	0.815	0.0406	J+	--	0.699	J+	--	0.262	J+	--	1.61	J+	--

Notes:
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* = The highest detected concentration between primary and field duplicate samples is presented.
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Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.as estimated. A plus (+) or minus (-)
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samples were not used in the EPC calculation because they are not located within the disposal site boundary.

Table 1-3
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-5			WCCS-5			WCCS-6			WCCS-6		
										5/12/2014			5/12/2014			5/12/2014			5/12/2014		
										0.25-0.5			1.5-1.75			1-1.25			2-2.25		
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL
Polychlorinated Biphenyls (mg/kg)																					
Aroclor-1242	1	1	4	4	4	4	100	0.210	0.0639	< 0.0363	--	0.01815	< 0.382	--	0.191	< 0.0353	--	0.01765	< 0.0354	--	0.0177
Aroclor-1248	1	1	4	4	4	4	100	2.50	0.281	< 0.0363	--	0.01815	< 0.382	--	0.191	< 0.0353	--	0.01765	< 0.0354	--	0.0177
Aroclor-1254	1	1	4	4	4	4	100	4.53	0.44	< 0.0363	--	0.01815	1.69	J	--	< 0.0353	--	0.01765	< 0.0354	--	0.0177
Aroclor-1260	1	1	4	4	4	4	100	33.4	2.39	0.0329	--	--	< 0.382	--	0.191	0.0445	--	--	0.136	J	--
Total PCBs	1	1	4	4	4	4	100	33.4	2.71	0.0329	--	--	1.69	--	--	0.0445	--	--	0.136	--	--
Metals (mg/kg)																					
Antimony	20	20	30	30	30	30	300	80.0	9.27	< 0.551	--	0.2755	3.6	J-	--	0.462	J-	--	0.511	J-	--
Arsenic	20	20	20	20	50	50	500	16.7	6.97	3.28	--	--	9.24	--	--	4.71	--	--	4.2	--	--
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	513	107	16.9	J+	--	127	J+	--	29.7	J+	--	20.9	J+	--
Beryllium	90	90	200	200	200	200	2,000	1.16	0.533	0.327	--	--	0.842	--	--	0.585	--	--	0.551	--	--
Cadmium	70	70	60	60	60	60	1,000	13.5	3.62	0.399	--	--	6.2	--	--	0.384	--	--	0.218	--	--
Chromium	100	100	200	200	200	200	2,000	129	27.3	10.2	J-	--	23.4	J-	--	9.6	J-	--	7.96	J-	--
Lead	200	200	600	600	600	600	6,000	4,290	671	28.6	J+	--	611	J+	--	28.5	J+	--	34.4	J+	--
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	1,350	89.7	6.64	--	--	46.1	--	--	10.1	--	--	8.31	--	--
Selenium	400	400	700	700	700	700	7,000	3.75	0.643	< 0.551	--	0.2755	< 0.564	--	0.282	< 0.497	--	0.2485	< 0.519	--	0.2595
Silver	100	100	200	200	200	200	2,000	6.52	0.830	< 0.551	--	0.2755	0.574	--	--	< 0.497	--	0.2485	< 0.519	--	0.2595
Vanadium	400	400	40	40	50	50	7,000	45.4	18.9	10.3	--	--	32.7	--	--	17	--	--	13.6	--	--
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,800	1,329	113	--	--	1210	--	--	94.2	--	--	64.8	--	--
Mercury	20	20	30	30	30	30	300	2.74	0.815	0.0341	J+	--	2.74	--	--	0.0386	J+	--	0.0254	--	--

Notes:
mg/kg = Milligrams per kilogram.
ft bgs = Feet below ground surface.
NA = No standard available.
Only constituents that have been detected at least once among relevant samples are presented.
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< = Constituent is not detected; value presented is the laboratory reporting limit (RL).
Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.as estimated. A plus (+) or minus (-)
Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.
To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").
Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).
Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.
samples were not used in the EPC calculation because they are not located within the disposal site boundary.

Table 1-3
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-7			WCCS-7			WCCS-8			WCCS-8						
										5/12/2014			5/12/2014			5/12/2014			5/12/2014						
										0.75-1			1.25-1.5			0.33-0.66			1.25-1.5						
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL				
Polychlorinated Biphenyls (mg/kg)																									
Aroclor-1242	1	1	4	4	4	4	100	0.210	0.0639	< 0.0367	--	0.01835	< 0.342	--	0.171	< 0.184	--	0.092	< 0.179	--	0.0895				
Aroclor-1248	1	1	4	4	4	4	100	2.50	0.281	< 0.0367	--	0.01835	< 0.342	--	0.171	< 0.184	--	0.092	< 0.179	--	0.0895				
Aroclor-1254	1	1	4	4	4	4	100	4.53	0.44	0.0181	J	--	< 0.342	--	0.171	< 0.184	--	0.092	< 0.179	--	0.0895				
Aroclor-1260	1	1	4	4	4	4	100	33.4	2.39	< 0.0367	--	0.01835	1.78	J	--	0.474	--	--	0.533	J	--				
Total PCBs	1	1	4	4	4	4	100	33.4	2.71	0.0181	--	--	1.78	--	--	0.474	--	--	0.533	--	--				
Metals (mg/kg)																									
Antimony	20	20	30	30	30	30	300	80.0	9.27	< 0.512	--	0.256	3.08	J-	--	1.59	J-	--	0.675	J-	--				
Arsenic	20	20	20	20	50	50	500	16.7	6.97	4.22	--	--	6.91	--	--	5.17	--	--	4.63	--	--				
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	513	107	21.6	J+	--	82.1	J+	--	42.9	J+	--	96.7	J+	--				
Beryllium	90	90	200	200	200	200	2,000	1.16	0.533	0.34	--	--	0.516	--	--	0.368	--	--	0.316	--	--				
Cadmium	70	70	60	60	60	60	1,000	13.5	3.62	0.456	--	--	2.17	--	--	0.991	--	--	0.825	--	--				
Chromium	100	100	200	200	200	200	2,000	129	27.3	9.38	J-	--	67.9	J-	--	16.1	J-	--	7.71	J-	--				
Lead	200	200	600	600	600	600	6,000	4,290	671	24.8	J+	--	608	J+	--	179	J+	--	272	J+	--				
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	1,350	89.7	8.36	--	--	90.6	--	--	14.5	--	--	9.44	--	--				
Selenium	400	400	700	700	700	700	7,000	3.75	0.643	< 0.512	--	0.256	< 0.5	--	0.25	< 0.588	--	0.294	< 0.524	--	0.262				
Silver	100	100	200	200	200	200	2,000	6.52	0.830	< 0.512	--	0.256	< 0.5	--	0.25	< 0.588	--	0.294	< 0.524	--	0.262				
Vanadium	400	400	40	40	50	50	7,000	45.4	18.9	13.8	--	--	19.9	--	--	17.7	--	--	15	--	--				
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,800	1,329	86.7	--	--	469	--	--	223	--	--	359	--	--				
Mercury	20	20	30	30	30	30	300	2.74	0.815	0.0497	--	--	1.22	--	--	0.365	J+	--	0.127	J+	--				

Notes:
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Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.
To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").
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samples were not used in the EPC calculation because they are not located within the disposal site boundary.

Table 1-3
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-9			WCCS-9			WCCS-10			WCCS-10		
										5/12/2014			5/12/2014			5/12/2014			5/12/2014		
										0.5-0.75			1-1.25			0.5-0.75			2.5-3*		
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL
Polychlorinated Biphenyls (mg/kg)																					
Aroclor-1242	1	1	4	4	4	4	100	0.210	0.0639	< 0.0372	--	0.0186	< 0.192	--	0.096	< 0.713	--	NC	< 0.0657	UJ	0.03285
Aroclor-1248	1	1	4	4	4	4	100	2.50	0.281	< 0.0372	--	0.0186	< 0.192	--	0.096	< 0.713	--	0.3565	< 0.0657	UJ	0.03285
Aroclor-1254	1	1	4	4	4	4	100	4.53	0.44	< 0.0372	--	0.0186	< 0.192	--	0.096	< 0.713	--	0.3565	< 0.0657	UJ	0.03285
Aroclor-1260	1	1	4	4	4	4	100	33.4	2.39	0.106	--	--	0.426	--	--	4.22	J	--	0.555	J	--
Total PCBs	1	1	4	4	4	4	100	33.4	2.71	0.106	--	--	0.426	--	--	4.22	--	--	0.555	--	--
Metals (mg/kg)																					
Antimony	20	20	30	30	30	30	300	80.0	9.27	< 0.538	--	0.269	1.96	J-	--	5.13	J-	--	1.76	J-	--
Arsenic	20	20	20	20	50	50	500	16.7	6.97	3.57	--	--	8.17	--	--	10.7	--	--	10.3	--	--
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	513	107	17.6	J+	--	50	J+	--	85.2	J+	--	51.8	J+	--
Beryllium	90	90	200	200	200	200	2,000	1.16	0.533	0.395	--	--	0.855	--	--	1.01	--	--	0.525	--	--
Cadmium	70	70	60	60	60	60	1,000	13.5	3.62	0.175	--	--	1.29	--	--	4.7	--	--	1.09	--	--
Chromium	100	100	200	200	200	200	2,000	129	27.3	9.85	J-	--	23.9	J-	--	76.2	J-	--	14.8	J-	--
Lead	200	200	600	600	600	600	6,000	4,290	671	44	J+	--	261	J+	--	933	J+	--	389	J+	--
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	1,350	89.7	7.08	--	--	26.9	--	--	81.4	--	--	12.6	--	--
Selenium	400	400	700	700	700	700	7,000	3.75	0.643	< 0.538	--	0.269	< 0.609	--	0.3045	0.987	--	--	< 0.639	--	0.3195
Silver	100	100	200	200	200	200	2,000	6.52	0.830	< 0.538	--	0.269	< 0.609	--	0.3045	1.64	--	--	< 0.639	--	0.3195
Vanadium	400	400	40	40	50	50	7,000	45.4	18.9	12.1	--	--	23.9	--	--	45.4	--	--	20.9	--	--
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,800	1,329	56	--	--	295	--	--	1200	--	--	237	--	--
Mercury	20	20	30	30	30	30	300	2.74	0.815	0.0585	--	--	0.413	J+	--	2.27	--	--	0.415	--	--

Notes:
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Table 1-3
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-11			WCCS-11			WCCS-12			WCCS-12					
										5/12/2014			5/12/2014			5/12/2014			5/12/2014					
										0.75-1*			2.5-3			0.75-1			1-1.25					
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL			
Polychlorinated Biphenyls (mg/kg)																								
Aroclor-1242	1	1	4	4	4	4	100	0.210	0.0639	0.21	J	--	< 5.74	--	NC	< 0.788	--	NC	< 0.356	--	0.178			
Aroclor-1248	1	1	4	4	4	4	100	2.50	0.281	< 0.172	--	0.086	< 5.74	--	NC	2.5	J	--	0.615	J	--			
Aroclor-1254	1	1	4	4	4	4	100	4.53	0.44	< 0.172	--	0.086	< 5.74	--	2.87	< 0.788	--	0.394	< 0.356	--	0.178			
Aroclor-1260	1	1	4	4	4	4	100	33.4	2.39	0.831	J	--	33.4	J	--	5.06	J	--	1.3	J	--			
Total PCBs	1	1	4	4	4	4	100	33.4	2.71	1.041	--	--	33.4	--	--	7.56	--	--	1.915	--	--			
Metals (mg/kg)																								
Antimony	20	20	30	30	30	30	300	80.0	9.27	< 0.51	--	0.255	0.94	--	--	80	--	--	54.9	--	--			
Arsenic	20	20	20	20	50	50	500	16.7	6.97	4.59	--	--	14.3	--	--	12.1	--	--	6.35	--	--			
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	513	107	29.8	--	--	83.3	--	--	513	--	--	275	--	--			
Beryllium	90	90	200	200	200	200	2,000	1.16	0.533	1.16	--	--	0.595	--	--	0.566	--	--	0.627	--	--			
Cadmium	70	70	60	60	60	60	1,000	13.5	3.62	1.23	--	--	3.67	--	--	12.8	--	--	7.45	--	--			
Chromium	100	100	200	200	200	200	2,000	129	27.3	7.79	--	--	18.4	--	--	79.5	--	--	27	--	--			
Lead	200	200	600	600	600	600	6,000	4,290	671	121	J-	--	388	J-	--	4290	J-	--	2320	J-	--			
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	1,350	89.7	9.73	--	--	19.3	--	--	75.1	--	--	24.1	--	--			
Selenium	400	400	700	700	700	700	7,000	3.75	0.643	< 0.51	--	0.255	0.712	--	--	3.75	--	--	1.24	--	--			
Silver	100	100	200	200	200	200	2,000	6.52	0.830	< 0.51	--	0.255	0.481	--	--	6.52	--	--	2.82	--	--			
Vanadium	400	400	40	40	50	50	7,000	45.4	18.9	6.95	--	--	27.8	--	--	39.9	--	--	15.4	--	--			
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,800	1,329	261	--	--	564	--	--	5550	--	--	2740	--	--			
Mercury	20	20	30	30	30	30	300	2.74	0.815	0.21	J+	--	2.17	--	--	2.62	--	--	2	--	--			

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To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").
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Table 1-3
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-13			WCCS-13			WCCS-14			WCCS-15		
										5/12/2014			5/12/2014			7/30/2014			7/30/2014		
										0-0.25			0.5-0.75			0-0.25*			2-3		
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL
Polychlorinated Biphenyls (mg/kg)																					
Aroclor-1242	1	1	4	4	4	4	100	0.210	0.0639	< 3.37	--	NC	< 4.11	--	NC	< 0.0362	--	0.0181	< 0.0354	--	0.0177
Aroclor-1248	1	1	4	4	4	4	100	2.50	0.281	< 3.37	--	1.685	< 4.11	--	2.055	< 0.0362	--	0.0181	< 0.0354	--	0.0177
Aroclor-1254	1	1	4	4	4	4	100	4.53	0.44	< 3.37	--	1.685	< 4.11	--	2.055	< 0.0362	--	0.0181	< 0.0354	--	0.0177
Aroclor-1260	1	1	4	4	4	4	100	33.4	2.39	8.99	--	--	9.26	--	--	0.134	--	--	0.0433	--	--
Total PCBs	1	1	4	4	4	4	100	33.4	2.71	8.99	--	--	9.26	--	--	0.134	--	--	0.0433	--	--
Metals (mg/kg)																					
Antimony	20	20	30	30	30	30	300	80.0	9.27	41.1	--	--	13.1	--	--	--	--	--	--	--	--
Arsenic	20	20	20	20	50	50	500	16.7	6.97	15.5	--	--	9.88	--	--	--	--	--	--	--	--
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	513	107	268	--	--	87	--	--	--	--	--	--	--	--
Beryllium	90	90	200	200	200	200	2,000	1.16	0.533	0.561	--	--	0.615	--	--	--	--	--	--	--	--
Cadmium	70	70	60	60	60	60	1,000	13.5	3.62	9.29	--	--	13.5	--	--	--	--	--	--	--	--
Chromium	100	100	200	200	200	200	2,000	129	27.3	129	--	--	36.1	--	--	--	--	--	--	--	--
Lead	200	200	600	600	600	600	6,000	4,290	671	2890	J-	--	1140	J-	--	--	--	--	--	--	--
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	1,350	89.7	96.6	--	--	90.9	--	--	--	--	--	--	--	--
Selenium	400	400	700	700	700	700	7,000	3.75	0.643	2.06	--	--	1.53	--	--	--	--	--	--	--	--
Silver	100	100	200	200	200	200	2,000	6.52	0.830	2.08	--	--	1.07	--	--	--	--	--	--	--	--
Vanadium	400	400	40	40	50	50	7,000	45.4	18.9	34.9	--	--	24.1	--	--	--	--	--	--	--	--
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,800	1,329	2760	--	--	1330	--	--	--	--	--	--	--	--
Mercury	20	20	30	30	30	30	300	2.74	0.815	1.52	--	--	0.868	--	--	--	--	--	--	--	--

Notes:
mg/kg = Milligrams per kilogram.
ft bgs = Feet below ground surface.
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* = The highest detected concentration between primary and field duplicate samples is presented.
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Table 1-3
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-16			WCCS-17			WCCS-18			WCCS-19					
										7/30/2014			7/30/2014			7/30/2014			7/30/2014					
										0.25-0.5			2-3			2-3			2-3					
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL			
Polychlorinated Biphenyls (mg/kg)																								
Aroclor-1242	1	1	4	4	4	4	100	0.210	0.0639	< 0.698	--	NC	< 0.0358	--	0.0179	< 0.0372	--	0.0186	< 0.0354	--	0.0177			
Aroclor-1248	1	1	4	4	4	4	100	2.50	0.281	< 0.698	--	0.349	< 0.0358	--	0.0179	< 0.0372	--	0.0186	< 0.0354	--	0.0177			
Aroclor-1254	1	1	4	4	4	4	100	4.53	0.44	< 0.698	--	0.349	< 0.0358	--	0.0179	< 0.0372	--	0.0186	< 0.0354	--	0.0177			
Aroclor-1260	1	1	4	4	4	4	100	33.4	2.39	10.7	--	--	0.0832	--	--	0.0246	--	--	0.13	--	--			
Total PCBs	1	1	4	4	4	4	100	33.4	2.71	10.7	--	--	0.0832	--	--	0.0246	--	--	0.13	--	--			
Metals (mg/kg)																								
Antimony	20	20	30	30	30	30	300	80.0	9.27	--	--	--	--	--	--	--	--	--	--	--	--			
Arsenic	20	20	20	20	50	50	500	16.7	6.97	--	--	--	--	--	--	--	--	--	--	--	--			
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	513	107	--	--	--	--	--	--	--	--	--	--	--	--			
Beryllium	90	90	200	200	200	200	2,000	1.16	0.533	--	--	--	--	--	--	--	--	--	--	--	--			
Cadmium	70	70	60	60	60	60	1,000	13.5	3.62	--	--	--	--	--	--	--	--	--	--	--	--			
Chromium	100	100	200	200	200	200	2,000	129	27.3	--	--	--	--	--	--	--	--	--	--	--	--			
Lead	200	200	600	600	600	600	6,000	4,290	671	--	--	--	--	--	--	--	--	--	--	--	--			
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	1,350	89.7	--	--	--	--	--	--	--	--	--	--	--	--			
Selenium	400	400	700	700	700	700	7,000	3.75	0.643	--	--	--	--	--	--	--	--	--	--	--	--			
Silver	100	100	200	200	200	200	2,000	6.52	0.830	--	--	--	--	--	--	--	--	--	--	--	--			
Vanadium	400	400	40	40	50	50	7,000	45.4	18.9	--	--	--	--	--	--	--	--	--	--	--	--			
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,800	1,329	--	--	--	--	--	--	--	--	--	--	--	--			
Mercury	20	20	30	30	30	30	300	2.74	0.815	--	--	--	--	--	--	--	--	--	--	--	--			

Notes:
mg/kg = Milligrams per kilogram.
ft bgs = Feet below ground surface.
NA = No standard available.
Only constituents that have been detected at least once among relevant samples are presented.
* = The highest detected concentration between primary and field duplicate samples is presented.
** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.
< = Constituent is not detected; value presented is the laboratory reporting limit (RL).
Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.as estimated. A plus (+) or minus (-)
Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.
To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").
Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).
Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.
samples were not used in the EPC calculation because they are not located within the disposal site boundary.

Table 1-3
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (0-3' bgs)
175 & 189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-20			WCCS-21			WCCS-22			WCCS-23		
										7/30/2014			7/30/2014			7/30/2014			7/30/2014		
										2-3			2-3			2-3			2-3		
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL
Polychlorinated Biphenyls (mg/kg)																					
Aroclor-1242	1	1	4	4	4	4	100	0.210	0.0639	< 0.0345	--	0.01725	< 0.0356	--	0.0178	< 0.035	--	0.0175	< 0.0337	--	0.01685
Aroclor-1248	1	1	4	4	4	4	100	2.50	0.281	< 0.0345	--	0.01725	< 0.0356	--	0.0178	< 0.035	--	0.0175	< 0.0337	--	0.01685
Aroclor-1254	1	1	4	4	4	4	100	4.53	0.44	< 0.0345	--	0.01725	< 0.0356	--	0.0178	< 0.035	--	0.0175	< 0.0337	--	0.01685
Aroclor-1260	1	1	4	4	4	4	100	33.4	2.39	0.0449	--	--	0.0597	--	--	0.036	--	--	0.0217	--	--
Total PCBs	1	1	4	4	4	4	100	33.4	2.71	0.0449	--	--	0.0597	--	--	0.036	--	--	0.0217	--	--
Metals (mg/kg)																					
Antimony	20	20	30	30	30	30	300	80.0	9.27	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	20	20	20	20	50	50	500	16.7	6.97	--	--	--	--	--	--	--	--	--	--	--	--
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	513	107	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	90	90	200	200	200	200	2,000	1.16	0.533	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	70	70	60	60	60	60	1,000	13.5	3.62	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	100	100	200	200	200	200	2,000	129	27.3	--	--	--	--	--	--	--	--	--	--	--	--
Lead	200	200	600	600	600	600	6,000	4,290	671	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	1,350	89.7	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	400	400	700	700	700	700	7,000	3.75	0.643	--	--	--	--	--	--	--	--	--	--	--	--
Silver	100	100	200	200	200	200	2,000	6.52	0.830	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	400	400	40	40	50	50	7,000	45.4	18.9	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,800	1,329	--	--	--	--	--	--	--	--	--	--	--	--
Mercury	20	20	30	30	30	30	300	2.74	0.815	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
mg/kg = Milligrams per kilogram.
ft bgs = Feet below ground surface.
NA = No standard available.
Only constituents that have been detected at least once among relevant samples are presented.
* = The highest detected concentration between primary and field duplicate samples is presented.
** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.
< = Constituent is not detected; value presented is the laboratory reporting limit (RL).
Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.as estimated. A plus (+) or minus (-)
Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.
To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").
Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).
Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.
samples were not used in the EPC calculation because they are not located within the disposal site boundary.

Table 1-4
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (>3' bgs)
175 &189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-1			WCCS-1			WCCS-2				
										5/12/2014			7/31/2014			5/12/2014				
										5-5.5			8.5-9.5			4-4.5				
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL		
Polychlorinated Biphenyls (mg/kg)																				
Aroclor-1242	1	1	4	4	4	4	100	1.04	0.106	< 0.176	--	0.088	--	--	--	< 0.917	--	0.4585		
Aroclor-1254	1	1	4	4	4	4	100	17.4	1.26	0.75	J	--	--	--	--	6.56	--	--		
Aroclor-1260	1	1	4	4	4	4	100	1.53	0.218	< 0.176	--	0.088	--	--	--	< 0.917	--	0.4585		
Total PCBs	1	1	4	4	4	4	100	18.4	2.19	0.75	--	--	--	--	--	6.56	--	--		
Metals (mg/kg)																				
Antimony	20	20	30	30	30	30	300	24.5	4.32	1.12	--	--	< 0.53	UJ	0.265	20	--	--		
Arsenic	20	20	20	20	50	50	500	65.3	11.3	6.03	--	--	1.97	--	--	21.3	--	--		
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1,390	215	145	--	--	8.08	--	--	695	--	--		
Beryllium	90	90	200	200	200	200	2,000	1.08	0.494	0.471	--	--	0.243	--	--	0.532	--	--		
Cadmium	70	70	60	60	60	60	1,000	88.4	11.7	3.57	--	--	< 0.212	--	0.106	24.8	--	--		
Chromium	100	100	200	200	200	200	2,000	151	30.9	25.3	--	--	7.18	--	--	116	--	--		
Lead	200	200	600	600	600	600	6,000	3,480	584	353	--	--	4.28	--	--	2290	--	--		
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	274	51.8	43.8	--	--	7.29	--	--	156	--	--		
Selenium	400	400	700	700	700	700	7,000	2.14	0.600	< 0.57	--	0.285	< 0.53	--	0.265	2.14	--	--		
Silver	100	100	200	200	200	200	2,000	2.73	0.810	0.275	--	--	< 0.53	--	0.265	2.4	--	--		
Vanadium	400	400	40	40	50	50	7,000	37.4	16.1	12.8	J-	--	13.1	--	--	33.8	J-	--		
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,500	1,694	878	--	--	23.9	J-	--	3370	--	--		
Mercury	20	20	30	30	30	30	300	12.2	1.73	0.553	J+	--	< 0.107	--	0.0535	12.2	J+	--		

Notes:
mg/kg = Milligrams per kilogram.
ft bgs = Feet below ground surface.
NA = No standard available.
Only constituents that have been detected at least once among relevant samples are presented.
* = The highest detected concentration between primary and field duplicate samples is presented.
** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.
< = Constituent is not detected; value presented is the laboratory reporting limit (RL).
Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified as estimated. A plus (+) or minus (-) sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.

Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.
To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").
Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).
Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

Table 1-4
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (>3' bgs)
175 &189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-2			WCCS-3			WCCS-3			WCCS-4			
										7/31/2014			5/12/2014			7/31/2014			5/12/2014			
										8.5-9.5			4.5-5			9-10			4-4.5			
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	
Polychlorinated Biphenyls (mg/kg)																						
Aroclor-1242	1	1	4	4	4	4	100	1.04	0.106	< 0.0439	--	0.02195	1.04	--	--	< 0.0679	--	0.03395	< 0.743	--	0.3715	
Aroclor-1254	1	1	4	4	4	4	100	17.4	1.26	< 0.0439	--	0.02195	17.4	--	--	< 0.0679	--	0.03395	5.01	J	--	
Aroclor-1260	1	1	4	4	4	4	100	1.53	0.218	< 0.0439	--	0.02195	< 1.88	--	0.94	< 0.0679	--	0.03395	< 0.743	--	0.3715	
Total PCBs	1	1	4	4	4	4	100	18.4	2.19	ND	--	--	18.44	--	--	ND	--	--	5.01	--	--	
Metals (mg/kg)																						
Antimony	20	20	30	30	30	30	300	24.5	4.32	< 0.675	UJ	0.3375	15.3	--	--	< 1.02	UJ	0.51	2.54	--	--	
Arsenic	20	20	20	20	50	50	500	65.3	11.3	1.22	--	--	18.1	--	--	2.05	--	--	11.5	--	--	
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1,390	215	20.9	--	--	716	--	--	30.6	--	--	425	--	--	
Beryllium	90	90	200	200	200	200	2,000	1.08	0.494	0.647	--	--	0.378	--	--	1.08	--	--	0.59	--	--	
Cadmium	70	70	60	60	60	60	1,000	88.4	11.7	0.0716	--	--	34.3	--	--	0.119	--	--	7.42	--	--	
Chromium	100	100	200	200	200	200	2,000	151	30.9	5.56	--	--	56.6	--	--	5.18	--	--	32.3	--	--	
Lead	200	200	600	600	600	600	6,000	3,480	584	16.5	--	--	2520	--	--	11.4	--	--	800	--	--	
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	274	51.8	3.44	--	--	180	--	--	2.27	--	--	49.3	--	--	
Selenium	400	400	700	700	700	700	7,000	2.14	0.600	< 0.675	--	0.3375	1.86	--	--	1.03	--	--	0.84	--	--	
Silver	100	100	200	200	200	200	2,000	2.73	0.810	< 0.675	--	0.3375	2.73	--	--	< 1.02	--	0.51	1.48	--	--	
Vanadium	400	400	40	40	50	50	7,000	37.4	16.1	10.4	--	--	34.7	J-	--	6.73	--	--	26	J-	--	
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,500	1,694	15.4	J-	--	11000	--	--	13.8	J-	--	1100	--	--	
Mercury	20	20	30	30	30	30	300	12.2	1.73	0.0381	--	--	11.8	J+	--	0.0645	--	--	1.71	J+	--	

Notes:
mg/kg = Milligrams per kilogram.
ft bgs = Feet below ground surface.
NA = No standard available.
Only constituents that have been detected at least once among relevant samples are presented.
* = The highest detected concentration between primary and field duplicate samples is presented.
** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.
< = Constituent is not detected; value presented is the laboratory reporting limit (RL).
Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified as estimated. A plus (+) or minus (-) sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.

Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.
To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").
Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).
Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

Table 1-4
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (>3' bgs)
175 &189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-4			WCCS-5			WCCS-5			WCCS-6		
										7/31/2014			5/12/2014			7/31/2014			5/12/2014		
										7.5-8.5			4-4.5*			5-5.5			4.5-5		
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL
Polychlorinated Biphenyls (mg/kg)																					
Aroclor-1242	1	1	4	4	4	4	100	1.04	0.106	< 0.036	--	0.018	< 0.41	--	0.205	< 0.0394	--	0.0197	< 2.2	--	NC
Aroclor-1254	1	1	4	4	4	4	100	17.4	1.26	< 0.036	--	0.018	< 0.41	--	0.205	< 0.0394	--	0.0197	5.19	J	--
Aroclor-1260	1	1	4	4	4	4	100	1.53	0.218	< 0.036	--	0.018	< 0.41	--	0.205	0.0671	--	--	< 2.2	--	1.1
Total PCBs	1	1	4	4	4	4	100	18.4	2.19	ND	--	--	ND	--	--	0.0671	--	--	5.19	--	--
Metals (mg/kg)																					
Antimony	20	20	30	30	30	30	300	24.5	4.32	< 0.558	UJ	0.279	2.63	J-	--	0.697	--	--	24.5	J-	--
Arsenic	20	20	20	20	50	50	500	65.3	11.3	3.68	--	--	8.69	--	--	5.67	--	--	18.6	--	--
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1,390	215	8.9	--	--	73.4	J+	--	39.9	--	--	817	J+	--
Beryllium	90	90	200	200	200	200	2,000	1.08	0.494	0.367	--	--	0.569	--	--	0.3	--	--	0.587	--	--
Cadmium	70	70	60	60	60	60	1,000	88.4	11.7	0.0737	--	--	4.16	--	--	1.67	--	--	50.6	--	--
Chromium	100	100	200	200	200	200	2,000	151	30.9	0.315	--	--	34.4	J-	--	9.32	--	--	71.1	J-	--
Lead	200	200	600	600	600	600	6,000	3,480	584	23.8	--	--	197	J+	--	137	--	--	3480	J+	--
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	274	51.8	0.757	--	--	35.2	--	--	15.4	--	--	175	--	--
Selenium	400	400	700	700	700	700	7,000	2.14	0.600	< 0.558	--	0.279	< 0.584	--	0.292	< 0.532	--	0.266	1.09	--	--
Silver	100	100	200	200	200	200	2,000	2.73	0.810	< 0.558	--	0.279	< 0.584	--	0.292	< 0.532	--	0.266	1.58	--	--
Vanadium	400	400	40	40	50	50	7,000	37.4	16.1	0.528	--	--	16.3	--	--	7.88	--	--	37.4	--	--
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,500	1,694	34.7	J-	--	931	--	--	346	--	--	12500	--	--
Mercury	20	20	30	30	30	30	300	12.2	1.73	< 0.112	--	0.056	0.284	J+	--	0.494	--	--	7.87	--	--

Notes:
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ft bgs = Feet below ground surface.
NA = No standard available.
Only constituents that have been detected at least once among relevant samples are presented.
* = The highest detected concentration between primary and field duplicate samples is presented.
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Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.
To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").
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Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

Table 1-4
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (>3' bgs)
175 &189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-6			WCCS-7			WCCS-7			WCCS-8							
										7/31/2014			5/12/2014			7/31/2014			5/12/2014							
										9-10			4-4.5			5-5.5			3.75-4.25							
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL					
Polychlorinated Biphenyls (mg/kg)																										
Aroclor-1242	1	1	4	4	4	4	100	1.04	0.106	< 0.0465	--	0.02325	< 0.0437	--	0.02185	< 0.0821	--	0.04105	< 0.0454	UJ	0.0227					
Aroclor-1254	1	1	4	4	4	4	100	17.4	1.26	< 0.0465	--	0.02325	0.0498	--	--	0.482	J	--	< 0.0454	UJ	0.0227					
Aroclor-1260	1	1	4	4	4	4	100	1.53	0.218	< 0.0465	--	0.02325	< 0.0437	--	0.02185	< 0.0821	--	0.04105	< 0.0454	UJ	0.0227					
Total PCBs	1	1	4	4	4	4	100	18.4	2.19	ND	--	--	0.0498	--	--	0.482	--	--	ND	--	--					
Metals (mg/kg)																										
Antimony	20	20	30	30	30	30	300	24.5	4.32	< 0.689	--	0.3445	3.78	J-	--	0.738	J-	--	4.72	J-	--					
Arsenic	20	20	20	20	50	50	500	65.3	11.3	65.3	--	--	11.2	--	--	3.62	--	--	14.5	--	--					
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1,390	215	21.7	--	--	44.4	J+	--	43	--	--	68.4	J+	--					
Beryllium	90	90	200	200	200	200	2,000	1.08	0.494	0.372	--	--	0.409	--	--	0.381	--	--	0.47	--	--					
Cadmium	70	70	60	60	60	60	1,000	88.4	11.7	0.152	--	--	36.1	--	--	3.44	--	--	0.359	--	--					
Chromium	100	100	200	200	200	200	2,000	151	30.9	5.81	--	--	29.1	J-	--	37.1	--	--	42.5	J-	--					
Lead	200	200	600	600	600	600	6,000	3,480	584	17.8	--	--	44.2	J+	--	125	--	--	64.6	J+	--					
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	274	51.8	4.5	--	--	28.7	--	--	62	--	--	49.8	--	--					
Selenium	400	400	700	700	700	700	7,000	2.14	0.600	0.732	--	--	< 0.705	--	0.3525	< 0.639	--	0.3195	< 0.717	--	0.3585					
Silver	100	100	200	200	200	200	2,000	2.73	0.810	< 0.689	--	0.3445	< 0.705	--	0.3525	< 0.639	--	0.3195	< 3.59	--	1.795					
Vanadium	400	400	40	40	50	50	7,000	37.4	16.1	12.2	--	--	15.4	--	--	13.6	--	--	15.5	--	--					
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,500	1,694	22.3	--	--	45.2	--	--	223	J-	--	83.5	--	--					
Mercury	20	20	30	30	30	30	300	12.2	1.73	0.0383	--	--	< 0.135	--	0.0675	0.328	--	--	0.102	J+	--					

Notes:
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Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

Table 1-4
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (>3' bgs)
175 &189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-9			WCCS-11			WCCS-12			WCCS-13				
										5/12/2014			7/31/2014			5/12/2014			5/12/2014				
										3.5-4			6.75-7.75*			3.5-4			3-3.5				
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL		
Polychlorinated Biphenyls (mg/kg)																							
Aroclor-1242	1	1	4	4	4	4	100	1.04	0.106	< 0.216	--	0.108	< 0.0443	--	0.02215	< 0.18	--	0.09	< 0.342	--	0.171		
Aroclor-1254	1	1	4	4	4	4	100	17.4	1.26	< 0.216	--	0.108	< 0.0443	--	0.02215	< 0.18	--	0.09	< 0.342	--	0.171		
Aroclor-1260	1	1	4	4	4	4	100	1.53	0.218	0.175	--	--	0.0795	--	--	0.523	J	--	1.53	J	--		
Total PCBs	1	1	4	4	4	4	100	18.4	2.19	0.175	--	--	0.0795	--	--	0.523	--	--	1.53	--	--		
Metals (mg/kg)																							
Antimony	20	20	30	30	30	30	300	24.5	4.32	3.91	J-	--	--	--	--	0.591	--	--	1.78	--	--		
Arsenic	20	20	20	20	50	50	500	65.3	11.3	11.9	--	--	--	--	--	6.85	--	--	4.54	--	--		
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1,390	215	77.3	J+	--	--	--	--	97.6	--	--	72.4	--	--		
Beryllium	90	90	200	200	200	200	2,000	1.08	0.494	0.543	--	--	--	--	--	0.431	--	--	0.334	--	--		
Cadmium	70	70	60	60	60	60	1,000	88.4	11.7	3.26	--	--	--	--	--	3.16	--	--	4	--	--		
Chromium	100	100	200	200	200	200	2,000	151	30.9	33	J-	--	--	--	--	8.5	--	--	15.1	--	--		
Lead	200	200	600	600	600	600	6,000	3,480	584	140	J+	--	--	--	--	196	J-	--	160	J-	--		
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	274	51.8	29.5	--	--	--	--	--	20.2	--	--	19.2	--	--		
Selenium	400	400	700	700	700	700	7,000	2.14	0.600	< 0.696	--	0.348	--	--	--	< 0.556	--	0.278	0.509	--	--		
Silver	100	100	200	200	200	200	2,000	2.73	0.810	1.23	--	--	--	--	--	0.521	--	--	0.337	--	--		
Vanadium	400	400	40	40	50	50	7,000	37.4	16.1	24.9	--	--	--	--	--	16.5	--	--	19.8	--	--		
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,500	1,694	524	--	--	--	--	--	908	--	--	824	--	--		
Mercury	20	20	30	30	30	30	300	12.2	1.73	0.28	--	--	--	--	--	1.21	--	--	0.558	--	--		

Notes:
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To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").
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Table 1-4
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (>3' bgs)
175 &189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-13			WCCS-14			WCCS-14			WCCS-15								
										7/31/2014			7/30/2014			7/30/2014			7/30/2014								
										5.5-6.5			3-4			6-7			10-11								
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL						
Polychlorinated Biphenyls (mg/kg)																											
Aroclor-1242	1	1	4	4	4	4	100	1.04	0.106	< 0.0379	--	0.01895	< 0.0347	--	0.01735	< 0.0393	--	0.01965	< 0.0471	--	0.02355						
Aroclor-1254	1	1	4	4	4	4	100	17.4	1.26	< 0.0379	--	0.01895	< 0.0347	--	0.01735	< 0.0393	--	0.01965	< 0.0471	--	0.02355						
Aroclor-1260	1	1	4	4	4	4	100	1.53	0.218	0.154	--	--	0.0604	J	--	0.0254	--	--	< 0.0471	--	0.02355						
Total PCBs	1	1	4	4	4	4	100	18.4	2.19	0.154	--	--	0.0604	--	--	0.0254	--	--	ND	--	--						
Metals (mg/kg)																											
Antimony	20	20	30	30	30	30	300	24.5	4.32	--	--	--	--	--	--	--	--	--	--	--	--						
Arsenic	20	20	20	20	50	50	500	65.3	11.3	--	--	--	--	--	--	--	--	--	--	--	--						
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1,390	215	--	--	--	--	--	--	--	--	--	--	--	--						
Beryllium	90	90	200	200	200	200	2,000	1.08	0.494	--	--	--	--	--	--	--	--	--	--	--	--						
Cadmium	70	70	60	60	60	60	1,000	88.4	11.7	--	--	--	--	--	--	--	--	--	--	--	--						
Chromium	100	100	200	200	200	200	2,000	151	30.9	--	--	--	--	--	--	--	--	--	--	--	--						
Lead	200	200	600	600	600	600	6,000	3,480	584	--	--	--	--	--	--	--	--	--	--	--	--						
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	274	51.8	--	--	--	--	--	--	--	--	--	--	--	--						
Selenium	400	400	700	700	700	700	7,000	2.14	0.600	--	--	--	--	--	--	--	--	--	--	--	--						
Silver	100	100	200	200	200	200	2,000	2.73	0.810	--	--	--	--	--	--	--	--	--	--	--	--						
Vanadium	400	400	40	40	50	50	7,000	37.4	16.1	--	--	--	--	--	--	--	--	--	--	--	--						
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,500	1,694	--	--	--	--	--	--	--	--	--	--	--	--						
Mercury	20	20	30	30	30	30	300	12.2	1.73	--	--	--	--	--	--	--	--	--	--	--	--						

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NA = No standard available.
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Table 1-4
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (>3' bgs)
175 &189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-16			WCCS-17			WCCS-18			WCCS-19								
										7/30/2014			7/30/2014			7/30/2014			7/30/2014								
										6.75-7.75			9-10			9-10			6-7								
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL						
Polychlorinated Biphenyls (mg/kg)																											
Aroclor-1242	1	1	4	4	4	4	100	1.04	0.106	< 0.0525	--	0.02625	< 0.0407	--	0.02035	< 0.0372	--	0.0186	< 0.0431	--	0.02155						
Aroclor-1254	1	1	4	4	4	4	100	17.4	1.26	< 0.0525	--	0.02625	< 0.0407	--	0.02035	< 0.0372	--	0.0186	< 0.0431	--	0.02155						
Aroclor-1260	1	1	4	4	4	4	100	1.53	0.218	< 0.0525	--	0.02625	0.0704	J	--	0.133	J	--	< 0.0431	--	0.02155						
Total PCBs	1	1	4	4	4	4	100	18.4	2.19	ND	--	--	0.0704	--	--	0.133	--	--	ND	--	--						
Metals (mg/kg)																											
Antimony	20	20	30	30	30	30	300	24.5	4.32	--	--	--	--	--	--	--	--	--	--	--	--						
Arsenic	20	20	20	20	50	50	500	65.3	11.3	--	--	--	--	--	--	--	--	--	--	--	--						
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1,390	215	--	--	--	--	--	--	--	--	--	--	--	--						
Beryllium	90	90	200	200	200	200	2,000	1.08	0.494	--	--	--	--	--	--	--	--	--	--	--	--						
Cadmium	70	70	60	60	60	60	1,000	88.4	11.7	--	--	--	--	--	--	--	--	--	--	--	--						
Chromium	100	100	200	200	200	200	2,000	151	30.9	--	--	--	--	--	--	--	--	--	--	--	--						
Lead	200	200	600	600	600	600	6,000	3,480	584	--	--	--	--	--	--	--	--	--	--	--	--						
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	274	51.8	--	--	--	--	--	--	--	--	--	--	--	--						
Selenium	400	400	700	700	700	700	7,000	2.14	0.600	--	--	--	--	--	--	--	--	--	--	--	--						
Silver	100	100	200	200	200	200	2,000	2.73	0.810	--	--	--	--	--	--	--	--	--	--	--	--						
Vanadium	400	400	40	40	50	50	7,000	37.4	16.1	--	--	--	--	--	--	--	--	--	--	--	--						
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,500	1,694	--	--	--	--	--	--	--	--	--	--	--	--						
Mercury	20	20	30	30	30	30	300	12.2	1.73	--	--	--	--	--	--	--	--	--	--	--	--						

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Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (>3' bgs)
175 &189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-20			WCCS-20			WCCS-21			WCCS-22			
										7/30/2014			7/30/2014			7/30/2014			7/30/2014			
										3.5-3.75			6.5-7.5			3.5-3.75			4-4.25			
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	Result	Qual.	1/2 RL	
Polychlorinated Biphenyls (mg/kg)																						
Aroclor-1242	1	1	4	4	4	4	100	1.04	0.106	--	--	--	< 0.0356	--	0.0178	--	--	--	--	--	--	
Aroclor-1254	1	1	4	4	4	4	100	17.4	1.26	--	--	--	< 0.0356	--	0.0178	--	--	--	--	--	--	
Aroclor-1260	1	1	4	4	4	4	100	1.53	0.218	--	--	--	< 0.0356	--	0.0178	--	--	--	--	--	--	
Total PCBs	1	1	4	4	4	4	100	18.4	2.19	--	--	--	ND	--	--	--	--	--	--	--	--	
Metals (mg/kg)																						
Antimony	20	20	30	30	30	30	300	24.5	4.32	< 0.576	UJ	0.288	< 0.55	UJ	0.275	< 0.536	UJ	0.268	14.1	J-	--	
Arsenic	20	20	20	20	50	50	500	65.3	11.3	5.09	--	--	3.77	--	--	4.93	--	--	28	--	--	
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1,390	215	38.5	--	--	26.3	--	--	43.6	--	--	1390	--	--	
Beryllium	90	90	200	200	200	200	2,000	1.08	0.494	0.464	--	--	0.271	--	--	0.685	--	--	0.252	--	--	
Cadmium	70	70	60	60	60	60	1,000	88.4	11.7	1.4	--	--	0.033	--	--	0.562	--	--	88.4	--	--	
Chromium	100	100	200	200	200	200	2,000	151	30.9	9.87	--	--	0.497	--	--	6.83	--	--	151	--	--	
Lead	200	200	600	600	600	600	6,000	3,480	584	111	--	--	18.4	--	--	213	--	--	2490	--	--	
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	274	51.8	16.2	--	--	0.51	--	--	13.4	--	--	274	--	--	
Selenium	400	400	700	700	700	700	7,000	2.14	0.600	< 0.576	--	0.288	< 0.55	--	0.275	< 0.536	--	0.268	0.817	--	--	
Silver	100	100	200	200	200	200	2,000	2.73	0.810	< 0.576	--	0.288	< 0.55	--	0.275	< 0.536	--	0.268	2.13	--	--	
Vanadium	400	400	40	40	50	50	7,000	37.4	16.1	11.1	--	--	2.6	--	--	10.7	--	--	17.9	--	--	
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,500	1,694	196	J-	--	47.6	J-	--	251	J-	--	5590	J-	--	
Mercury	20	20	30	30	30	30	300	12.2	1.73	0.169	--	--	< 0.102	--	0.051	0.0928	--	--	1.66	--	--	

Notes:
mg/kg = Milligrams per kilogram.
ft bgs = Feet below ground surface.
NA = No standard available.
Only constituents that have been detected at least once among relevant samples are presented.
* = The highest detected concentration between primary and field duplicate samples is presented.
** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.
< = Constituent is not detected; value presented is the laboratory reporting limit (RL).
Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified as estimated. A plus (+) or minus (-) sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.

Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.
To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").
Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).
Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

Table 1-4
Summary of Constituents Detected and Method 1 Risk Characterization for Soil
Off-Property Soil EPCs (>3' bgs)
175 &189 Intervale Street, Quincy, MA

Analytes	MCP Method 1/3 Soil Standards							Maximum Detected Concentration (mg/Kg)	Exposure Point Concentrations (mg/Kg)	WCCS-22			WCCS-23		
										7/30/2014			7/30/2014		
										10-11			10.5-11.5		
	S-1 & GW-2	S-1 & GW-3	S-2 & GW-2	S-2 & GW-3	S-3 & GW-2	S-3 & GW-3	UCL			Result	Qual.	1/2 RL	Result	Qual.	1/2 RL
Polychlorinated Biphenyls (mg/kg)															
Aroclor-1242	1	1	4	4	4	4	100	1.04	0.106	< 0.0471	--	0.02355	< 0.0345	--	0.01725
Aroclor-1254	1	1	4	4	4	4	100	17.4	1.26	< 0.0471	--	0.02355	< 0.0345	--	0.01725
Aroclor-1260	1	1	4	4	4	4	100	1.53	0.218	< 0.0471	--	0.02355	0.046	--	--
Total PCBs	1	1	4	4	4	4	100	18.4	2.19	ND	--	--	0.046	--	--
Metals (mg/kg)															
Antimony	20	20	30	30	30	30	300	24.5	4.32	< 0.718	UJ	0.359	--	--	--
Arsenic	20	20	20	20	50	50	500	65.3	11.3	1.48	--	--	--	--	--
Barium	1,000	1,000	3,000	3,000	5,000	5,000	10,000	1,390	215	36.8	--	--	--	--	--
Beryllium	90	90	200	200	200	200	2,000	1.08	0.494	0.992	--	--	--	--	--
Cadmium	70	70	60	60	60	60	1,000	88.4	11.7	0.194	--	--	--	--	--
Chromium	100	100	200	200	200	200	2,000	151	30.9	7.92	--	--	--	--	--
Lead	200	200	600	600	600	600	6,000	3,480	584	13.5	--	--	--	--	--
Nickel	600	600	1,000	1,000	1,000	1,000	10,000	274	51.8	4.76	--	--	--	--	--
Selenium	400	400	700	700	700	700	7,000	2.14	0.600	0.577	--	--	--	--	--
Silver	100	100	200	200	200	200	2,000	2.73	0.810	< 0.718	--	0.359	--	--	--
Vanadium	400	400	40	40	50	50	7,000	37.4	16.1	11.6	--	--	--	--	--
Zinc	1,000	1,000	3,000	3,000	5,000	5,000	10,000	12,500	1,694	29.4	J-	--	--	--	--
Mercury	20	20	30	30	30	30	300	12.2	1.73	0.0268	--	--	--	--	--

Notes:

mg/kg = Milligrams per kilogram.

ft bgs = Feet below ground surface.

NA = No standard available.

Only constituents that have been detected at least once among relevant samples are presented.

* = The highest detected concentration between primary and field duplicate samples is presented.

** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.

< = Constituent is not detected; value presented is the laboratory reporting limit (RL).

Data qualifiers presented in the "Qual." column are defined thus: A "UJ" indicates that a non-detect result was qualified as estimated. A "J" indicates that a detected result was qualified as estimated. A plus (+) or minus (-) sign indicates the direction of potential bias, if known. An "R" indicates that data were rejected due to gross failure.

Exposure Point Concentrations (EPCs) were calculated based upon the average concentrations across the entire disposal site for each constituent that was detected at least one time during assessment activities.

To calculate EPCs for results reported as non-detect, one-half of the RL was used as the representative concentration unless the RL exceeds two times the maximum detected concentration (indicated by "NC").

Method 1 S-1 Risk Characterization standards presented in this table are the most conservative standards applicable to the future uses of the site without institutional controls (i.e., an Activity and Use Limitation).

Exposure Point Concentrations (EPCs) that exceed any of the applicable MCP Method 1 soil standards are shaded in yellow.

Table 2
Summary of Groundwater Gauging and Elevation Data
 175 & 189 Intervale Street, Quincy, Massachusetts

Well ID	Total Depth	Screen Length	Surface Construction	MP	MP Elevation	October 2013		January 31, 2014	
						Depth to Water	Elevation	Depth to Water	Elevation
WCMW-1	14.0	10.0	Steel Standpipe	PVCP	43.5	9.7	33.8	8.14	35.36
WCMW-2	22.0	15.0	Flush mounted	PVCP	42.4	8.06	34.34	6.72	35.68
WCMW-3	14.0	10.0	Flush mounted	PVCP	40.9	7.02	33.88	5.61	35.29
WCMW-4	12.0	10.0	Steel Standpipe	PVCP	43.7	9.62	34.08	7.93	35.77
WCMW-5	24.0	15.0	Steel Standpipe	PVCP	43.1	11.56	31.54	9.94	33.16
WCMW-6	16.0	10.0	Steel Standpipe	PVCP	43.0	8.50	34.5	7.14	35.86
WCMW-7	24.0	15.0	Flush mounted	PVCP	40.8	8.77	32.03	7.16	33.64
WCMW-8	12.0	10.0	Steel Standpipe	GS	40.3	9.75	34.3	4.80	35.50
WCMW-9	12.0	10.0	Flush mounted	PVCP	40.5	6.19	34.31	4.82	35.68
WCMW-10	12.0	10.0	Steel Standpipe	PVCP	44.5	10.10	34.4	8.74	35.76
WCMW-11	16.0	10.0	Steel Standpipe	PVCP	40.8	7.20	33.6	5.02	35.78
MW-1R	16.0	10.0	Flush mounted	PVCP	42.7	8.81	33.89	7.10	35.60
MW-2R	14.0	10.0	Flush mounted	PVCP	40.4	6.92	33.48	4.60	35.80
MW-3R	14.0	10.0	Flush mounted	PVCP	40.4	6.08	34.32	4.70	35.70
MW-4R	14.0	10.0	Flush mounted	PVCP	40.1	5.75	34.35	4.39	35.71

Notes:

All measurements in feet

MP - Monitoring Point

GS = Ground Surface

PVC = Poly Vinyl Chloride Pipe

Elevation survey completed by DaSilva Survey Associates on January 27, 2014.

WCMW-8 standpipe construction damaged by drill rig before survey occurred. October 2013 groundwater elevation is approximate.

Light Non-Aqueous Phase Liquid was not detected during groundwater gauging events.

Table 3
Summary of Groundwater Field Parameters
175 & 189 Intervale Street
Quincy, Massachusetts

Well ID	Date	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTU)
MW-1R	04/23/13	NM	NM	NM	NM	NM	3.25
	10/03/13	16.44	3.764	0.31	6.28	-26.0	2.15
	01/27/14	10.00	3.136	0.34	6.41	-108.6	0.95
MW-2R	10/03/13	18.30	5.834	0.06	6.89	-84.2	2.23
	01/27/14	7.30	1.545	0.55	6.51	21.5	2.45
MW-3R	04/23/13	NM	NM	NM	NM	NM	2.84
	10/04/13	18.64	3.037	0.19	6.50	-45.8	3.14
	01/27/14	7.40	1.554	3.10	6.76	24.7	2.70
MW-4R	04/23/13	NM	NM	NM	NM	NM	5.19
	10/04/13	19.65	3.407	0.06	6.43	-91.6	4.11
	01/27/14	9.90	3.151	0.08	6.77	-97.9	4.40
WCMW-1	10/03/13	17.87	2.737	0.16	6.76	-55.9	3.17
	01/27/14	7.40	1.846	4.18	6.24	171.4	5.12
	01/31/14	7.20	1.130	6.42	6.22	56.1	3.33
WCMW-2	10/03/13	18.02	5.961	0.10	6.77	-53.0	8.48
	01/27/14	9.20	5.733	0.07	6.84	-50.8	4.81
WCMW-3	10/04/13	17.23	3.211	0.08	6.97	-78.3	18.6
	01/27/14	8.40	0.766	0.19	6.27	81.0	42.4
WCMW-4	10/03/13	17.48	2.866	0.11	6.69	-38.0	4.41
	01/27/14	6.00	0.669	4.58	6.31	44.1	0.56
WCMW-5	10/03/13	17.47	3.889	0.10	6.30	-6.9	40.7
	01/27/14	11.90	3.067	0.01	6.13	-16.6	3.29
WCMW-6	10/03/13	17.17	5.783	0.07	6.45	-57.6	9.22
	01/27/14	9.60	1.819	0.67	6.56	-32.1	5.27
WCMW-7	10/03/13	16.19	3.062	0.07	6.27	-15.6	26.8
	01/27/14	11.80	2.792	0.01	6.30	-32.2	5.21
WCMW-8	10/03/13	17.51	3.473	0.07	6.53	-45.1	5.21
	01/28/14	6.50	0.746	0.02	6.13	49.9	7.22
WCMW-9	10/03/13	20.10	5.601	0.10	6.73	-95.5	4.34
	01/27/14	8.30	2.673	0.01	6.73	-42.3	1.55
WCMW-10	10/03/13	17.63	6.240	0.23	6.35	-51.1	4.3
	01/28/14	6.00	1.485	0.11	6.79	-37.6	2.33
WCMW-11	10/03/13	17.08	3.919	0.07	6.32	-63.3	74.5
	01/27/14	8.40	1.255	3.72	6.75	-2.2	5.79

Notes:

NM = Not measured

ft. bpvc = feet below PVC riser

DO = dissolved oxygen

ORP = oxidation-reduction potential

NTU = Nephelometric Turbidity Units

mV = millivolts

mg/L = milligrams per liter

(mS/cm) = millisiemens per centimeter

°C = degrees celcius

Table 4
Summary of Groundwater Analytical Results
175 & 189 Intervale Street
Quincy, Massachusetts

Well ID	MW-1	MW-1R			MW-2	MW-2R		MW-3	MW-3R			MW-4	MW-4R			WCMW-1				WCMW-2	
Sample Date	4/12/89	4/23/13	10/3/13	1/27/14	4/12/89	10/3/13	1/27/14	4/12/89	4/23/13*	10/4/13	1/27/14	4/12/89	4/23/13	10/4/13	1/27/14	10/3/13	1/27/14	1/31/14	1/31/14	10/3/13	1/27/14
Volatile Organic Compounds (VOCs)																					
1,2,4-Trimethylbenzene	--	< 1	< 10	< 5	--	< 10	< 5	--	< 1	< 10	< 5	--	3	< 10	< 5	< 10	< 1	--	--	< 10	< 5
1,3-Dichlorobenzene	< 2	< 1	< 10	< 5	14	< 10	< 5	< 1	< 1	< 10	< 5	< 1	< 1	< 10	< 5	< 10	< 1	--	--	11.3	8.32
1,4-Dichlorobenzene	< 2	< 1	< 10	< 5	84	< 10	< 5	< 1	< 1	< 10	< 5	< 1	< 1	< 10	< 5	< 10	< 1	--	--	< 10	< 5
Benzene	< 2	< 1	< 10	< 5	< 5	< 10	< 5	< 1	< 1	< 10	< 5	1	2.9	< 10	< 5	< 10	< 1	--	--	< 10	< 5
Chlorobenzene	< 2	< 1	< 10	< 5	12	< 10	< 5	< 1	< 1	< 10	< 5	< 1	< 1	< 10	< 5	< 10	< 1	--	--	< 10	< 5
Chloroform	< 2	< 2	< 10	< 5	< 5	< 10	< 5	1	< 2	< 10	< 5	< 1	< 2	< 10	< 5	< 10	< 1	--	--	< 10	< 5
cis-1,2-Dichloroethylene	340	< 1	< 10	< 5	< 5	< 10	4.13	12	5.6	11.7	< 5	140	< 1	< 10	< 5	< 10	< 1	--	--	< 10	< 5
Isopropylbenzene (Cumene)	--	< 1	< 10	< 5	--	< 10	< 5	--	< 1	< 10	< 5	--	1.1	< 10	< 5	< 10	< 1	--	--	< 10	< 5
m+p Xylene	< 2	< 2	< 20	< 10	33	< 20	< 10	< 1	< 2	< 20	< 10	< 1	< 2	< 20	< 10	< 20	< 2	--	--	< 20	< 10
Methyl tert-Butyl Ether (MTBE)	< 20	< 1	< 10	< 5	< 50	< 10	< 5	< 10	< 1	< 10	< 5	< 10	60	35.7	20.4	< 10	< 1	--	--	4.08	2.57
Naphthalene	--	< 2	< 50	< 25	--	< 50	14.7	--	< 2	< 50	< 25	--	26	56	44.5	< 50	< 5	--	--	< 50	< 25
o-Xylene	< 2	< 1	< 10	< 5	34	< 10	< 5	< 1	< 1	< 10	< 5	< 1	1.8	< 10	< 5	< 10	< 1	--	--	< 10	< 5
tert-Amyl Methyl Ether (TAME)	--	< 5	< 50	< 25	--	< 50	< 25	--	< 5	< 50	< 25	--	12	7.92	3	< 50	< 5	--	--	< 50	< 25
Tetrachloroethylene	38	< 1	< 10	< 5	< 5	< 10	4.4	22	18	10.4	7.92	38	< 1	< 10	3.79	< 10	2.32	--	--	< 10	< 5
Toluene	< 2	< 1	< 10	< 5	11	< 10	< 5	< 1	< 1	< 10	< 5	< 1	< 1	< 10	< 5	< 10	< 1	--	--	< 10	< 5
trans-1,2-Dichloroethylene	4	< 1	< 10	< 5	< 5	< 10	< 5	< 1	< 1	< 10	< 5	< 1	< 1	< 10	< 5	< 10	< 1	--	--	< 10	< 5
Trichloroethylene	14	< 1	< 10	< 5	< 5	< 10	< 5	10	5.7	9.7	4.08	28	< 1	< 10	< 5	< 10	0.746	--	--	< 10	< 5
Vinyl Chloride	63	< 2	< 10	< 5	< 5	< 10	5.19	< 1	< 2	< 10	< 5	12	< 2	< 10	< 5	< 10	< 1	--	--	< 10	< 5
Volatile Petroleum Hydrocarbons (VPH)																					
C5-C8 Aliphatics (adjusted)	--	< 100	< 50	< 5	--	< 50	< 5	--	< 100	< 50	< 5	--	< 100	< 50	< 25	< 50	< 5	--	--	< 50	< 5
C9-C12 Aliphatics (adjusted)	--	< 100	< 50	< 5	--	< 50	< 5	--	100	< 50	< 5	--	< 100	< 50	< 25	< 50	< 5	--	--	< 50	< 5
C9-C10 Aromatics	--	< 100	< 50	< 5	--	< 50	3.14	--	< 100	< 50	< 5	--	300	99	57.4	24.7	< 5	--	--	10	8.04
Extractable Petroleum Hydrocarbons (EPH)																					
C9-C18 Aliphatics	--	< 100	< 48 UJ	23.6 J-	--	13.2	56.9 J-	--	< 100	< 47.6 UJ	19.5 J-	--	< 100	84.5 J	181 J-	109 J	< 48.9	--	--	< 47.5 UJ	< 51.8 UJ
C19-C36 Aliphatics	--	< 100	24.3 J	< 47.7 UJ	--	< 47.6	< 47.5 UJ	--	< 100	< 47.6 UJ	< 47.7 UJ	--	< 100	< 47.7 UJ	< 47.7 UJ	< 47.7 UJ	< 48.9	--	--	19.6 J	< 51.8 UJ
C11-C22 Aromatics (Adjusted)	--	110	< 50	< 50	--	< 50	< 50 UJ	--	130	< 50	< 50	--	490	313	145 J-	< 50	< 50	--	--	< 50	< 50
2-Methylnaphthalene	--	< 2	< 9.59	< 9.55	--	< 9.52	< 9.5 UJ	--	< 2	< 9.52	< 9.53	--	33	27.1	4.81 J-	< 9.54	< 9.77	--	--	< 9.49	< 10.4
Acenaphthene	--	< 2	< 9.59	< 9.55	--	8.64	3.27 J-	--	< 2	< 9.52	< 9.53	--	87	98.3	26.6 J-	4.94	< 9.77	--	--	< 9.49	< 10.4
Fluoranthene	--	< 2	< 9.59	< 9.55	--	2.34	< 9.5 UJ	--	< 2	< 9.52	< 9.53	--	2.3	3.88	2.12 J-	< 9.54	< 9.77	--	--	< 9.49	< 10.4
Fluorene	--	< 2	< 9.59	< 9.55	--	6.92	4.28 J-	--	< 2	< 9.52	< 9.53	--	29	43.4	22 J-	3.78	< 9.77	--	--	< 9.49	< 10.4
Naphthalene	--	< 2	< 9.59	< 9.55	--	3.16	< 9.5 UJ	--	< 2	< 9.52	< 9.53	--	20	26.4	5.76 J-	3.3	< 9.77	--	--	< 9.49	< 10.4
Phenanthrene	--	< 2	< 9.59	< 9.55	--	11.3	5.05 J-	--	< 2	< 9.52	< 9.53	--	33	47.1	26.5 J-	5.83	< 9.77	--	--	< 9.49	< 10.4
Pyrene	--	< 2	< 9.59	< 9.55	--	< 9.52	< 9.5 UJ	--	< 2	< 9.52	< 9.53	--	< 2	2.05	< 9.53 UJ	< 9.54	< 9.77	--	--	< 9.49	< 10.4
Polychlorinated Biphenyls (PCBs)																					
Aroclor-1242	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.154 J	< 0.233	--	--
Dissolved Metals																					
Antimony	--	< 1	< 6	< 6	--	< 6	< 6	--	1.7	< 6	< 6	--	< 1	< 6	< 6	< 6	< 6	--	--	< 6	26.2
Arsenic	--	1.7	< 10	< 10	--	< 10	< 10	--	1.7 J	6.09	< 10	--	1.8	< 10	< 10	< 10	< 10	--	--	7.74	7.22
Barium	--	85	157	94.7	--	248	81	--	220	146	72	--	380	396	273	78.9	58.3	--	--	152	99.4
Cadmium	--	< 0.5	< 1	< 1	--	< 1	< 1	--	2.1	0.72	2.94	--	< 0.5	< 1	< 1	< 1	0.94	--	--	< 1	0.64
Chromium	--	< 1	1.46	< 5	--	1.31	< 5	--	< 1	1.23	< 5	--	< 1	1.3	< 5	1.17	< 5	--	--	1.63	< 5
Lead	--	< 1	< 5	< 5	--	< 5	< 5	--	1.3	< 5	< 5	--	< 1	< 5	< 5	< 5	< 5	--	--	< 5	4.72
Nickel	--	6.5	< 10	4.3	--	3.35	4.55	--	16	7.21	10.3	--	5.6	2.3	4.75	6.52	47.7	--	--	3.58	5.72
Vanadium	--	< 5	1.59	1.92	--	< 10	< 10	--	< 5	< 10	< 10	--	< 5	< 10	< 10	< 10	< 10	--	--	< 10	< 10
Zinc	--	< 10	1.71	< 50	--	2.7	66	--	470	112	481	--	< 10	2.56	85.6	4.26	51.4	--	--	22.6	57.7

Notes:

Only analytes that have been detected at least once among relevant samples are presented.

< = Analyte is not detected; value presented is the laboratory reporting limit (RL).

Detected results are presented in **bold font**.

Concentrations presented in units of micrograms per liter (ug/L).

J = Detected result qualified as estimated. A minus sign ("-") indicates potential low bias.

UJ = Non-detect result qualified as estimated.

* = Result presented represents the highest detected concentration between primary and field duplicate samples. If both results are non-detect, the lowest RL is presented.

** = Naphthalene was analyzed via more than one analytical method. The highest detected concentration among all methods for each sample is presented. If all results are non-detect, the lowest RL is presented.

Samples of groundwater from WCMW-1 were collected and submitted to a laboratory for PCB analysis using low-flow sampling techniques. One sample was filtered and the other was not filtered to evaluate whether sediment in the sample would produce a false positive in the samples collected.

Table 4
Summary of Groundwater Analytical Results
175 & 189 Intervale Street
Quincy, Massachusetts

Well ID	WCMW-3		WCMW-4		WCMW-5		WCMW-6		WCMW-7		WCMW-8		WCMW-9		WCMW-10		WCMW-11	
Sample Date	10/4/13	1/27/14	10/3/13	1/27/14	10/3/13	1/27/14	10/3/13	1/27/14	10/3/13*	1/27/14*	10/3/13	1/28/14	10/3/13	1/27/14	10/3/13	1/28/14	10/3/13	1/27/14
Volatile Organic Compounds (VOCs)																		
1,2,4-Trimethylbenzene	< 10	< 1	< 10	< 1	< 10	< 5	< 10	< 5	< 5	< 2	< 10	< 1	< 10	< 5	< 10	< 5	< 10	< 5
1,3-Dichlorobenzene	< 10	< 1	< 10	< 1	< 10	< 5	< 10	< 5	< 5	< 2	< 10	< 1	< 10	< 5	< 10	< 5	< 10	< 5
1,4-Dichlorobenzene	< 10	< 1	< 10	< 1	< 10	< 5	< 10	< 5	< 5	< 2	< 10	< 1	< 10	< 5	< 10	< 5	< 10	< 5
Benzene	< 10	< 1	< 10	< 1	< 10	< 5	< 10	< 5	< 5	< 2	< 10	< 1	< 10	< 5	< 10	< 5	< 10	< 5
Chlorobenzene	< 10	< 1	< 10	< 1	82.4	8	< 10	< 5	< 5	< 2	< 10	< 1	< 10	< 5	< 10	< 5	< 10	< 5
Chloroform	< 10	< 1	< 10	< 1	< 10	< 5	< 10	< 5	< 5	< 2	< 10	< 1	< 10	< 5	< 10	< 5	< 10	< 5
cis-1,2-Dichloroethylene	< 10	< 1	< 10	< 1	< 10	< 5	< 10	< 5	86	109	< 10	2.96	< 10	< 5	< 10	< 5	< 10	< 5
Isopropylbenzene (Cumene)	< 10	< 1	< 10	< 1	< 10	< 5	< 10	< 5	< 5	< 2	< 10	< 1	< 10	< 5	< 10	< 5	< 10	< 5
m+p Xylene	< 20	< 2	< 20	< 2	< 20	< 10	< 20	< 10	< 10	< 4	< 20	< 2	< 20	< 10	< 20	< 10	< 20	< 10
Methyl tert-Butyl Ether (MTBE)	3.6	< 1	< 10	< 1	7.93	12	2.14	< 5	< 5	2	< 10	< 1	3.6	< 5	2.9	< 5	< 10	< 5
Naphthalene	< 50	< 5	< 50	< 5	< 50	< 25	< 50	< 25	< 25	< 10	< 50	< 5	< 50	< 25	< 50	< 25	< 50	< 25
o-Xylene	< 10	< 1	< 10	< 1	< 10	< 5	< 10	< 5	< 5	< 2	< 10	< 1	< 10	< 5	< 10	< 5	< 10	< 5
tert-Amyl Methyl Ether (TAME)	< 50	< 5	< 50	< 5	< 50	< 25	< 50	< 25	< 25	< 10	< 50	< 5	< 50	< 25	< 50	< 25	< 50	< 25
Tetrachloroethylene	< 10	3.5	< 10	1.72	< 10	< 5	< 10	< 5	< 5	< 2	< 10	1.97	< 10	9.61	< 10	< 5	< 10	9.11
Toluene	< 10	< 1	< 10	< 1	< 10	< 5	< 10	< 5	< 5	< 2	< 10	< 1	< 10	< 5	< 10	< 5	< 10	< 5
trans-1,2-Dichloroethylene	< 10	< 1	< 10	< 1	< 10	< 5	< 10	< 5	< 5	< 2	< 10	< 1	< 10	< 5	< 10	< 5	< 10	< 5
Trichloroethylene	< 10	1.03	< 10	0.479	< 10	< 5	< 10	< 5	23.9	7.53	< 10	2.26	5.33	3.7	< 10	< 5	< 10	< 5
Vinyl Chloride	11.4	< 1	< 10	< 1	< 10	< 5	< 10	< 5	< 5	3.66	< 10	< 1	< 10	< 5	< 10	< 5	< 10	< 5
Volatile Petroleum Hydrocarbons (VPH)																		
C5-C8 Aliphatics (adjusted)	< 50	< 5	< 50	< 5	< 50	< 5	27.5	4.23	< 50	1.93	< 50	< 5	< 50	1.83	< 50	< 5	< 50	< 5
C9-C12 Aliphatics (adjusted)	< 50	< 5	< 50	< 5	< 50	< 5	< 50	< 5	< 50	< 5	< 50	< 5	< 50	< 5	< 50	< 5	< 50	< 5
C9-C10 Aromatics	< 50	< 5	< 50	< 5	9.38	3.58	< 50	0.506	< 50	< 5	< 50	< 5	< 50	1.74	< 50	< 5	< 50	< 5
Extractable Petroleum Hydrocarbons (EPH)																		
C9-C18 Aliphatics	< 48.8 UJ	13.1 J-	< 47.5 UJ	< 47.8	19.5	10 J-	13.9	15.5 J-	12.9	18.4 J-	< 47.4	17.3	< 47.3 UJ	10.9 J-	10.3	< 47.4 UJ	< 55.2	< 47.3 UJ
C19-C36 Aliphatics	15.3 J	< 47.5 UJ	11.4 J	< 47.8	< 47.9	< 47.7 UJ	< 47.4	< 47.4 UJ	16.5	< 47.3 UJ	< 47.4	< 48	9.61 J	< 47.5 UJ	< 47.4	< 47.4 UJ	15.8	< 47.3 UJ
C11-C22 Aromatics (Adjusted)	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50
2-Methylnaphthalene	< 9.75	< 9.51	< 9.5	< 9.56	< 9.57	< 9.55	< 9.47	< 9.47	< 9.45	< 9.46	< 9.49	< 9.59	< 9.47	< 9.5	< 9.48	< 9.48	< 11	< 9.47
Acenaphthene	< 9.75	< 9.51	< 9.5	< 9.56	< 9.57	< 9.55	< 9.47	< 9.47	< 9.45	< 9.46	< 9.49	< 9.59	< 9.47	< 9.5	< 9.48	< 9.48	< 11	< 9.47
Fluoranthene	< 9.75	< 9.51	< 9.5	< 9.56	< 9.57	< 9.55	< 9.47	< 9.47	< 9.45	< 9.46	< 9.49	< 9.59	< 9.47	< 9.5	< 9.48	< 9.48	< 11	< 9.47
Fluorene	< 9.75	< 9.51	< 9.5	< 9.56	< 9.57	< 9.55	< 9.47	< 9.47	< 9.45	< 9.46	< 9.49	< 9.59	< 9.47	< 9.5	< 9.48	< 9.48	< 11	< 9.47
Naphthalene	< 9.75	< 9.51	< 9.5	< 9.56	< 9.57	< 9.55	< 9.47	< 9.47	< 9.45	< 9.46	< 9.49	< 9.59	< 9.47	< 9.5	< 9.48	< 9.48	< 11	< 9.47
Phenanthrene	2.94	< 9.51	< 9.5	< 9.56	2.52	< 9.55	1.89	< 9.47	< 9.45	< 9.46	< 9.49	< 9.59	1.93	< 9.5	< 9.48	< 9.48	< 11	< 9.47
Pyrene	< 9.75	< 9.51	< 9.5	< 9.56	< 9.57	< 9.55	< 9.47	< 9.47	< 9.45	< 9.46	< 9.49	< 9.59	< 9.47	< 9.5	< 9.48	< 9.48	< 11	< 9.47
Polychlorinated Biphenyls (PCBs)																		
Aroclor-1242	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Metals																		
Antimony	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6
Arsenic	5.73	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	6.41	8.15	< 10	< 10	5.63	< 10
Barium	46.3	51.7	75.4	53.7	396	287	399	187	420	304	335	179	337	176	351	153	160	48.4
Cadmium	< 1	0.7	< 1	1.97	< 1	< 1	< 1	6.52	< 1	< 1	< 1	12.2	< 1	1.7	< 1	< 1	< 1	< 1
Chromium	< 5	< 5	1.26	< 5	1.6	< 5	1.61	< 5	1.81	< 5	1.33	< 5	1.6	< 5	1.87	< 5	1.72	< 5
Lead	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Nickel	1.6	9.46	2.25	50.2	2.51	1.75	29.6	42.1	3.76	4.57	< 10	72.9	8.62	24.2	2.57	6.17	3.89	11.4
Vanadium	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	1.99	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Zinc	5.14	261	3.5	636	10.7	< 50	687	2200	13	< 50	3.01	978	63.8	666	4.31	< 50	13.2	374

Notes:
Only analytes that have been detected at least once among relevant samples are presented.
< = Analyte is not detected; value presented is the laboratory reporting limit (RL).
Detected results are presented in **bold font**.
Concentrations presented in units of micrograms per liter (ug/L).
J = Detected result qualified as estimated. A minus sign ("-") indicates potential low bias.
UJ = Non-detect result qualified as estimated.
* = Result presented represents the highest detected concentration between primary and field duplicate samples. If both results are non-detect, the lowest RL is presented.
** = Naphthalene was analyzed via more than one analytical method. The highest detected concentration among all methods for each sample is presented. If all results are non-detect, the lowest RL is presented.
Samples of groundwater from WCMW-1 were collected and submitted to a laboratory for PCB analysis using low-flow sampling techniques. One sample was filtered and the other was not filtered to evaluate whether sediment in the sample would produce a false positive in the samples collected.

Table 5
Method 1 Risk Characterization for Groundwater Analytical Data
175 & 189 Intervale Street, Quincy, Massachusetts

Sample ID	MCP Method 1 Standards		UCL	Maximum Detected Concentration	MW-1R							MW-2R					MW-3R							
Sampling Date					4/23/13		10/3/13		1/27/14		EPC	10/3/13		1/27/14		EPC	4/23/13		10/4/13		1/27/14		EPC	
Analytes	GW-2	GW-3			Result	1/2 RL	Result	1/2 RL	Result	1/2 RL	ug/L	Result	1/2 RL	Result	1/2 RL	ug/L	Result	1/2 RL	Result	1/2 RL	Result	1/2 RL	ug/L	
Volatile Organic Compounds (VOCs) - ug/L																								
1,2,4-Trimethylbenzene	NA	NA	NA	3.0	< 1	0.5	< 10	NC	< 5	2.5	1.5	< 10	NC	< 5	2.5	2.5	< 1	0.5	< 10	NC	< 5	2.5	1.5	
1,3-Dichlorobenzene	6000	50000	100000	11.3	< 1	0.5	< 10	5	< 5	2.5	2.7	< 10	5	< 5	2.5	3.8	< 1	0.5	< 10	5	< 5	2.5	2.7	
Benzene	1000	10000	100000	2.9	< 1	0.5	< 10	NC	< 5	2.5	1.5	< 10	NC	< 5	2.5	2.5	< 1	0.5	< 10	NC	< 5	2.5	1.5	
Chlorobenzene	200	1000	10000	82.4	< 1	0.5	< 10	5	< 5	2.5	2.7	< 10	5	< 5	2.5	3.8	< 1	0.5	< 10	5	< 5	2.5	2.7	
cis-1,2-Dichloroethylene	20	50000	100000	109	< 1	0.5	< 10	5	< 5	2.5	2.7	< 10	5	4.13	--	4.6	5.6	--	11.7	--	11.7	--	9.7	
Isopropylbenzene (Cumene)	NA	NA	NA	1.1	< 1	0.5	< 10	NC	< 5	NC	0.5	< 10	NC	< 5	NC	--	< 1	0.5	< 10	NC	< 5	NC	0.5	
Methyl tert-Butyl Ether (MTBE)	50000	50000	100000	60	< 1	0.5	< 10	5	< 5	2.5	2.7	< 10	5	< 5	2.5	3.8	< 1	0.5	< 10	5	< 5	2.5	2.7	
Naphthalene**	700	20000	100000	56	< 2	1	< 9.59	4.795	< 9.55	4.775	3.5	3.16	--	14.7	--	8.9	< 2	1	< 9.52	4.76	< 9.53	4.765	3.5	
o-Xylene	3000	5000	100000	1.8	< 1	0.5	< 10	NC	< 5	NC	0.5	< 10	NC	< 5	NC	--	< 1	0.5	< 10	NC	< 5	NC	0.5	
tert-Amyl Methyl Ether (TAME)	NA	NA	NA	12	< 5	2.5	< 50	NC	< 25	NC	2.5	< 50	NC	< 25	NC	--	< 5	2.5	< 50	NC	< 25	NC	2.5	
Tetrachloroethylene	50	30000	100000	17	< 1	0.5	< 10	5	< 5	2.5	2.7	< 10	5	4.4	--	4.7	17	--	10.4	--	7.92	--	11.8	
Trichloroethylene	5	5000	50000	23.9	< 1	0.5	< 10	5	< 5	2.5	2.7	< 10	5	< 5	2.5	3.8	5.7	--	9.7	--	4.08	--	6.5	
Vinyl Chloride	2	50000	100000	11.4	< 2	1	< 10	5	< 5	2.5	2.8	< 10	5	5.19	--	5.1	< 2	1	< 10	5	< 5	2.5	2.8	
Volatile Petroleum Hydrocarbons (VPH) - ug/L																								
C5-C8 Aliphatics (adjusted)	3000	50000	100000	27.5	< 100	NC	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8	< 100	NC	< 50	25	< 5	2.5	13.8	
C9-C12 Aliphatics (adjusted)	5000	50000	100000	100	< 100	50	< 50	25	< 5	2.5	25.8	< 50	25	< 5	2.5	13.8	100	--	< 50	25	< 5	2.5	42.5	
C9-C10 Aromatics	4000	50000	100000	300	< 100	50	< 50	25	< 5	2.5	25.8	< 50	25	3.14	--	14.1	< 100	50	< 50	25	< 5	2.5	25.8	
Extractable Petroleum Hydrocarbons (EPH) - ug/L																								
C9-C18 Aliphatics	5000	50000	100000	181	< 100	50	< 48	24	23.6	--	32.5	13.2	--	56.9	--	35.1	< 100	50	< 47.6	23.8	19.5	--	31.1	
C19-C36 Aliphatics	NA	50000	100000	24.3	< 100	NC	24.3	--	< 47.7	23.85	24.1	< 47.6	23.8	< 47.5	23.75	23.8	< 100	NC	< 47.6	23.8	< 47.7	23.85	23.8	
C11-C22 Aromatics (Adjusted)	50000	5000	100000	490	110	--	< 50	25	< 50	25	53.3	< 50	25	< 50	25	25.0	130	--	< 50	25	< 50	25	60.0	
2-Methylnaphthalene	2000	20000	100000	33	< 2	1	< 9.59	4.795	< 9.55	4.775	3.5	< 9.52	4.76	< 9.5	4.75	4.8	< 2	1	< 9.52	4.76	< 9.53	4.765	3.5	
Acenaphthene	NA	10000	100000	98.3	< 2	1	< 9.59	4.795	< 9.55	4.775	3.5	8.64	--	3.27	--	6.0	< 2	1	< 9.52	4.76	< 9.53	4.765	3.5	
Fluoranthene	NA	200	2000	3.88	< 2	1	< 9.59	NC	< 9.55	NC	1.0	2.34	--	< 9.5	NC	2.3	< 2	1	< 9.52	NC	< 9.53	NC	1.0	
Fluorene	NA	40	400	43.4	< 2	1	< 9.59	4.795	< 9.55	4.775	3.5	6.92	--	4.28	--	5.6	< 2	1	< 9.52	4.76	< 9.53	4.765	3.5	
Phenanthrene	NA	10000	100000	47.1	< 2	1	< 9.59	4.795	< 9.55	4.775	3.5	11.3	--	5.05	--	8.2	< 2	1	< 9.52	4.76	< 9.53	4.765	3.5	
Pyrene	NA	20	600	2.05	< 2	1	< 9.59	NC	< 9.55	NC	1.0	< 9.52	NC	< 9.5	NC	--	< 2	1	< 9.52	NC	< 9.53	NC	1.0	
Polychlorinated Biphenyls (PCBs) - ug/L																								
Aroclor-1242	5	10	100	0.154	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Dissolved Metals - ug/L																								
Antimony	NA	8000	80000	26.2	< 1	0.5	< 6	3	< 6	3	2.2	< 6	3	< 6	3	3.0	1.7	--	< 6	3	< 6	3	2.6	
Arsenic	NA	900	9000	8.15	1.7	--	< 10	5	< 10	5	3.9	< 10	5	< 10	5	5.0	1.7	--	6.09	--	< 10	5	4.3	
Barium	NA	50000	100000	420	85	--	157	--	94.7	--	112.2	248	--	81	--	164.5	220	--	146	--	72	--	146.0	
Cadmium	NA	4	50	12.2	< 0.5	0.25	< 1	0.5	< 1	0.5	0.4	< 1	0.5	< 1	0.5	0.5	2.1	--	0.72	--	2.94	--	1.9	
Chromium	NA	300	3000	1.87	< 1	0.5	1.46	--	< 5	NC	1.0	1.31	--	< 5	NC	1.3	< 1	0.5	1.23	--	< 5	NC	0.9	
Lead	NA	10	150	4.72	< 1	0.5	< 5	2.5	< 5	2.5	1.8	< 5	2.5	< 5	2.5	2.5	1.3	--	< 5	2.5	< 5	2.5	2.1	
Nickel	NA	200	2000	72.9	6.5	--	< 10	5	4.3	--	5.3	3.35	--	4.55	--	4.0	16	--	7.21	--	10.3	--	11.2	
Vanadium	NA	4000	40000	1.99	< 5	NC	1.59	--	1.92	--	1.8	< 10	NC	< 10	NC	--	< 5	NC	< 10	NC	< 10	NC	--	
Zinc	NA	900	50000	2200	< 10	5	1.71	--	< 50	25	10.6	2.7	--	66	--	34.4	470	--	112	--	481	--	354.3	

Notes:

ug/L = Micrograms per liter.

NA = No standard available.

< = Constituent is not detected; value presented is the laboratory reporting limit (RL).

** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.

Groundwater Standards from the Massachusetts Department of Environmental Protection Massachusetts Contingency Plan (MCP) reported in ug/L.

Only constituents that have been detected at least once among relevant samples are presented.

Exposure point concentration represents the temporal average concentration among groundwater samples within the disposal site boundary.

For results reported as non-detect, one-half of the RL was used as the representative concentration, except where the RL exceeds two times the maximum detected concentration (as indicated by "NC").

Orange highlighted results exceeded the MCP GW-2 Risk Characterization Standards.

Yellow highlighted results exceeded the MCP GW-3 Risk Characterization Standards.

Table 5
Method 1 Risk Characterization for Groundwater Analytical Data
175 & 189 Intervale Street, Quincy, Massachusetts

Sample ID	MCP Method 1 Standards		UCL	Maximum Detected Concentration	MW-4R							WCMW-1							WCMW-2					WCMW-3				
Sampling Date					4/23/13		10/4/13		1/27/14		EPC	10/3/13		1/27/14		1/31/14		EPC	10/3/13		1/27/14		EPC	10/4/13		1/27/14		EPC
Analytes	GW-2	GW-3			Result	1/2 RL	Result	1/2 RL	Result	1/2 RL	ug/L	Result	1/2 RL	Result	1/2 RL	Result	1/2 RL	ug/L	Result	1/2 RL	Result	1/2 RL	ug/L	Result	1/2 RL	Result	1/2 RL	ug/L
Volatile Organic Compounds (VOCs) - ug/L																												
1,2,4-Trimethylbenzene	NA	NA	NA	3.0	3	--	< 10	NC	< 5	2.5	2.8	< 10	NC	< 1	0.5	--	--	0.5	< 10	NC	< 5	2.5	2.5	< 10	NC	< 1	0.5	0.5
1,3-Dichlorobenzene	6000	50000	100000	11.3	< 1	0.5	< 10	5	< 5	2.5	2.7	< 10	5	< 1	0.5	--	--	2.8	11.3	--	8.32	--	9.8	< 10	5	< 1	0.5	2.8
Benzene	1000	10000	100000	2.9	2.9	--	< 10	NC	< 5	2.5	2.7	< 10	NC	< 1	0.5	--	--	0.5	< 10	NC	< 5	2.5	2.5	< 10	NC	< 1	0.5	0.5
Chlorobenzene	200	1000	100000	82.4	< 1	0.5	< 10	5	< 5	2.5	2.7	< 10	5	< 1	0.5	--	--	2.8	< 10	5	< 5	2.5	3.8	< 10	5	< 1	0.5	2.8
cis-1,2-Dichloroethylene	20	50000	100000	109	< 1	0.5	< 10	5	< 5	2.5	2.7	< 10	5	< 1	0.5	--	--	2.8	< 10	5	< 5	2.5	3.8	< 10	5	< 1	0.5	2.8
Isopropylbenzene (Cumene)	NA	NA	NA	1.1	1.1	--	< 10	NC	< 5	NC	1.1	< 10	NC	< 1	0.5	--	--	0.5	< 10	NC	< 5	NC	--	< 10	NC	< 1	0.5	0.5
Methyl tert-Butyl Ether (MTBE)	50000	50000	100000	60	60	--	35.7	--	20.4	--	38.7	< 10	5	< 1	0.5	--	--	2.8	4.08	--	2.57	--	3.3	3.6	--	< 1	0.5	2.1
Naphthalene**	700	20000	100000	56	26	--	56	--	44.5	--	42.2	3.3	--	< 5	2.5	--	--	2.9	< 9.49	4.745	< 10.4	5.2	5.0	< 9.75	4.875	< 5	2.5	3.7
o-Xylene	3000	5000	100000	1.8	1.8	--	< 10	NC	< 5	NC	1.8	< 10	NC	< 1	0.5	--	--	0.5	< 10	NC	< 5	NC	--	< 10	NC	< 1	0.5	0.5
tert-Amyl Methyl Ether (TAME)	NA	NA	NA	12	12	--	7.92	--	3	--	7.6	< 50	NC	< 5	2.5	--	--	2.5	< 50	NC	< 25	NC	--	< 50	NC	< 5	2.5	2.5
Tetrachloroethylene	50	30000	100000	17	< 1	0.5	< 10	5	3.79	--	3.1	< 10	5	2.32	--	--	--	3.7	< 10	5	< 5	2.5	3.8	< 10	5	3.5	--	4.3
Trichloroethylene	5	5000	50000	23.9	< 1	0.5	< 10	5	< 5	2.5	2.7	< 10	5	0.746	--	--	--	2.9	< 10	5	< 5	2.5	3.8	< 10	5	1.03	--	3.0
Vinyl Chloride	2	50000	100000	11.4	< 2	1	< 10	5	< 5	2.5	2.8	< 10	5	< 1	0.5	--	--	2.8	< 10	5	< 5	2.5	3.8	11.4	--	< 1	0.5	6.0
Volatile Petroleum Hydrocarbons (VPH) - ug/L																												
C5-C8 Aliphatics (adjusted)	3000	50000	100000	27.5	< 100	NC	< 50	25	< 25	12.5	18.8	< 50	25	< 5	2.5	--	--	13.8	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8
C9-C12 Aliphatics (adjusted)	5000	50000	100000	100	< 100	50	< 50	25	< 25	12.5	29.2	< 50	25	< 5	2.5	--	--	13.8	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8
C9-C10 Aromatics	4000	50000	100000	300	300	--	99	--	57.4	--	152.1	24.7	--	< 5	2.5	--	--	13.6	10	--	8.04	--	9.0	< 50	25	< 5	2.5	13.8
Extractable Petroleum Hydrocarbons (EPH) - ug/L																												
C9-C18 Aliphatics	5000	50000	100000	181	< 100	50	84.5	--	181	--	105.2	109	--	< 48.9	24.45	--	--	66.7	< 47.5	23.75	< 51.8	25.9	24.8	< 48.8	24.4	13.1	--	18.8
C19-C36 Aliphatics	NA	50000	100000	24.3	< 100	NC	< 47.7	23.85	< 47.7	23.85	23.9	< 47.7	23.85	< 48.9	NC	--	--	23.9	19.6	--	< 51.8	NC	19.6	15.3	--	< 47.5	23.75	19.5
C11-C22 Aromatics (Adjusted)	50000	5000	100000	490	490	--	313	--	145	--	316.0	< 50	25	< 50	25	--	--	25.0	< 50	25	< 50	25	25.0	< 50	25	< 50	25	25.0
2-Methylnaphthalene	2000	20000	100000	33	33	--	27.1	--	4.81	--	21.6	< 9.54	4.77	< 9.77	4.885	--	--	4.8	< 9.49	4.745	< 10.4	5.2	5.0	< 9.75	4.875	< 9.51	4.755	4.8
Acenaphthene	NA	10000	100000	98.3	87	--	98.3	--	26.6	--	70.6	4.94	--	< 9.77	4.885	--	--	4.9	< 9.49	4.745	< 10.4	5.2	5.0	< 9.75	4.875	< 9.51	4.755	4.8
Fluoranthene	NA	200	2000	3.88	2.3	--	3.88	--	2.12	--	2.8	< 9.54	NC	< 9.77	NC	--	--	--	< 9.49	NC	< 10.4	NC	--	< 9.75	NC	< 9.51	NC	--
Fluorene	NA	40	400	43.4	29	--	43.4	--	22	--	31.5	3.78	--	< 9.77	4.885	--	--	4.3	< 9.49	4.745	< 10.4	5.2	5.0	< 9.75	4.875	< 9.51	4.755	4.8
Phenanthrene	NA	10000	100000	47.1	33	--	47.1	--	26.5	--	35.5	5.83	--	< 9.77	4.885	--	--	5.4	< 9.49	4.745	< 10.4	5.2	5.0	2.94	--	< 9.51	4.755	3.8
Pyrene	NA	20	600	2.05	< 2	1	2.05	--	< 9.53	NC	1.5	< 9.54	NC	< 9.77	NC	--	--	--	< 9.49	NC	< 10.4	NC	--	< 9.75	NC	< 9.51	NC	--
Polychlorinated Biphenyls (PCBs) - ug/L																												
Aroclor-1242	5	10	100	0.154	--	--	--	--	--	--	--	--	--	--	--	0.154	--	0.2	--	--	--	--	--	--	--	--	--	--
Dissolved Metals - ug/L																												
Antimony	NA	8000	80000	26.2	< 1	0.5	< 6	3	< 6	3	2.2	< 6	3	< 6	3	--	--	3.0	< 6	3	26.2	--	14.6	< 6	3	< 6	3	3.0
Arsenic	NA	900	9000	8.15	1.8	--	< 10	5	< 10	5	3.9	< 10	5	< 10	5	--	--	5.0	7.74	--	7.22	--	7.5	5.73	--	< 10	5	5.4
Barium	NA	50000	100000	420	380	--	396	--	273	--	349.7	78.9	--	58.3	--	--	--	68.6	152	--	99.4	--	125.7	46.3	--	51.7	--	49.0
Cadmium	NA	4	50	12.2	< 0.5	0.25	< 1	0.5	< 1	0.5	0.4	< 1	0.5	0.94	--	--	--	0.7	< 1	0.5	0.64	--	0.6	< 1	0.5	0.7	--	0.6
Chromium	NA	300	3000	1.87	< 1	0.5	1.3	--	< 5	NC	0.9	1.17	--	< 5	NC	--	--	1.2	1.63	--	< 5	NC	1.6	< 5	NC	< 5	NC	--
Lead	NA	10	150	4.72	< 1	0.5	< 5	2.5	< 5	2.5	1.8	< 5	2.5	< 5	2.5	--	--	2.5	< 5	2.5	4.72	--	3.6	< 5	2.5	< 5	2.5	2.5
Nickel	NA	200	2000	72.9	5.6	--	2.3	--	4.75	--	4.2	6.52	--	47.7	--	--	--	27.1	3.58	--	5.72	--	4.7	1.60	--	9.46	--	5.5
Vanadium	NA	4000	40000	1.99	< 5	NC	< 10	NC	< 10	NC	--	< 10	NC	< 10	NC	--	--	--	< 10	NC	< 10	NC	--	< 10	NC	< 10	NC	--
Zinc	NA	900	50000	2200	< 10	5	2.56	--	85.6	--	31.1	4.26	--	51.4	--	--	--	27.8	22.6	--	57.7	--	40.2	5.14	--	261	--	133.1

Notes:

ug/L = Micrograms per liter.

NA = No standard available.

< = Constituent is not detected; value presented is the laboratory reporting limit (RL).

** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.

Groundwater Standards from the Massachusetts Department of Environmental Protection Massachusetts Contingency Plan (MCP) reported in ug/L.

Only constituents that have been detected at least once among relevant samples are presented.

Exposure point concentration represents the temporal average concentration among groundwater samples within the disposal site boundary.

For results reported as non-detect, one-half of the RL was used as the representative concentration, except where the RL exceeds two times the maximum detected concentration (as indicated by "NC").

Orange highlighted results exceeded the MCP GW-2 Risk Characterization Standards.

Yellow highlighted results exceeded the MCP GW-3 Risk Characterization Standards.

Table 5 Method 1 Risk Characterization for Groundwater Analytical Data 175 & 189 Intervale Street, Quincy, Massachusetts																													
Sample ID	MCP Method 1 Standards		UCL	Maximum Detected Concentration	WCMW-4					WCMW-5					WCMW-6					WCMW-7					WCMW-8				
Sampling Date	GW-2	GW-3			10/3/13	1/27/14		EPC	10/3/13	1/27/14		EPC	10/3/13	1/27/14		EPC	10/3/13	1/27/14		EPC	10/3/13	1/28/14		EPC					
Analytes			Result	1/2 RL	Result	1/2 RL	ug/L	Result	1/2 RL	Result	1/2 RL	ug/L	Result	1/2 RL	Result	1/2 RL	ug/L	Result	1/2 RL	Result	1/2 RL	ug/L	Result	1/2 RL	Result	1/2 RL	ug/L		
Volatile Organic Compounds (VOCs) - ug/L																													
1,2,4-Trimethylbenzene	NA	NA	NA	3.0	< 10	NC	< 1	0.5	0.5	< 10	NC	< 5	2.5	2.5	< 10	NC	< 5	2.5	2.5	< 5	2.5	< 2	1	1.8	< 10	NC	< 1	0.5	0.5
1,3-Dichlorobenzene	6000	50000	100000	11.3	< 10	5	< 1	0.5	2.8	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8	< 5	2.5	< 2	1	1.8	< 10	5	< 1	0.5	2.8
Benzene	1000	10000	100000	2.9	< 10	NC	< 1	0.5	0.5	< 10	NC	< 5	2.5	2.5	< 10	NC	< 5	2.5	2.5	< 5	2.5	< 2	1	1.8	< 10	NC	< 1	0.5	0.5
Chlorobenzene	200	1000	10000	82.4	< 10	5	< 1	0.5	2.8	82.4	--	8	--	45.2	< 10	5	< 5	2.5	3.8	< 5	2.5	< 2	1	1.8	< 10	5	< 1	0.5	2.8
cis-1,2-Dichloroethylene	20	50000	100000	109	< 10	5	< 1	0.5	2.8	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8	86	--	109	--	97.5	< 10	5	2.96	--	4.0
Isopropylbenzene (Cumene)	NA	NA	NA	1.1	< 10	NC	< 1	0.5	0.5	< 10	NC	< 5	NC	--	< 10	NC	< 5	NC	--	< 5	NC	< 2	1	1.0	< 10	NC	< 1	0.5	0.5
Methyl tert-Butyl Ether (MTBE)	50000	50000	100000	60	< 10	5	< 1	0.5	2.8	7.93	--	12	--	10.0	2.14	--	< 5	2.5	2.3	< 5	2.5	2	--	2.3	< 10	5	< 1	0.5	2.8
Naphthalene**	700	20000	100000	56	< 9.5	4.75	< 5	2.5	3.6	< 9.57	4.785	< 9.55	4.775	4.8	< 9.47	4.735	< 9.47	4.735	4.7	< 9.47	4.735	< 9.48	4.74	4.7	< 9.49	4.745	< 5	2.5	3.6
o-Xylene	3000	5000	100000	1.8	< 10	NC	< 1	0.5	0.5	< 10	NC	< 5	NC	--	< 10	NC	< 5	NC	--	< 5	NC	< 2	1	1.0	< 10	NC	< 1	0.5	0.5
tert-Amyl Methyl Ether (TAME)	NA	NA	NA	12	< 50	NC	< 5	2.5	2.5	< 50	NC	< 25	NC	--	< 50	NC	< 25	NC	--	< 25	NC	< 10	5	5.0	< 50	NC	< 5	2.5	2.5
Tetrachloroethylene	50	30000	100000	17	< 10	5	1.72	--	3.4	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8	< 5	2.5	< 2	1	1.8	< 10	5	1.97	--	3.5
Trichloroethylene	5	5000	50000	23.9	< 10	5	0.479	--	2.7	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8	23.9	--	7.53	--	15.7	< 10	5	2.26	--	3.6
Vinyl Chloride	2	50000	100000	11.4	< 10	5	< 1	0.5	2.8	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8	< 5	2.5	3.66	--	3.1	< 10	5	< 1	0.5	2.8
Volatile Petroleum Hydrocarbons (VPH) - ug/L																													
C5-C8 Aliphatics (adjusted)	3000	50000	100000	27.5	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8	27.5	--	4.23	--	15.9	< 50	25	1.93	--	13.5	< 50	25	< 5	2.5	13.8
C9-C12 Aliphatics (adjusted)	5000	50000	100000	100	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8
C9-C10 Aromatics	4000	50000	100000	300	< 50	25	< 5	2.5	13.8	9.38	--	3.58	--	6.5	< 50	25	0.506	--	12.8	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8
Extractable Petroleum Hydrocarbons (EPH) - ug/L																													
C9-C18 Aliphatics	5000	50000	100000	181	< 47.5	23.75	< 47.8	23.9	23.8	19.5	--	10	--	14.8	13.9	--	15.5	--	14.7	12.9	--	12.4	--	12.7	< 47.4	23.7	17.3	--	20.5
C19-C36 Aliphatics	NA	50000	100000	24.3	11.4	--	< 47.8	23.9	17.7	< 47.9	23.95	< 47.7	23.85	23.9	< 47.4	23.7	< 47.4	23.7	23.7	16.5	--	< 47.3	23.65	20.1	< 47.4	23.7	< 48	24	23.9
C11-C22 Aromatics (Adjusted)	50000	5000	100000	490	< 50	25	< 50	25	25.0	< 50	25	< 50	25	25.0	< 50	25	< 50	25	25.0	< 50	25	< 50	25	25.0	< 50	25	< 50	25	25.0
2-Methylnaphthalene	2000	20000	100000	33	< 9.5	4.75	< 9.56	4.78	4.8	< 9.57	4.785	< 9.55	4.775	4.8	< 9.47	4.735	< 9.47	4.735	4.7	< 9.47	4.735	< 9.48	4.74	4.7	< 9.49	4.745	< 9.59	4.795	4.8
Acenaphthene	NA	10000	100000	98.3	< 9.5	4.75	< 9.56	4.78	4.8	< 9.57	4.785	< 9.55	4.775	4.8	< 9.47	4.735	< 9.47	4.735	4.7	< 9.47	4.735	< 9.48	4.74	4.7	< 9.49	4.745	< 9.59	4.795	4.8
Fluoranthene	NA	200	2000	3.88	< 9.5	NC	< 9.56	NC	--	< 9.57	NC	< 9.55	NC	--	< 9.47	NC	< 9.47	NC	--	< 9.47	NC	< 9.48	NC	--	< 9.49	NC	< 9.59	NC	--
Fluorene	NA	40	400	43.4	< 9.5	4.75	< 9.56	4.78	4.8	< 9.57	4.785	< 9.55	4.775	4.8	< 9.47	4.735	< 9.47	4.735	4.7	< 9.47	4.735	< 9.48	4.74	4.7	< 9.49	4.745	< 9.59	4.795	4.8
Phenanthrene	NA	10000	100000	47.1	< 9.5	4.75	< 9.56	4.78	4.8	2.52	--	< 9.55	4.775	3.6	1.89	--	< 9.47	4.735	3.3	< 9.47	4.735	< 9.48	4.74	4.7	< 9.49	4.745	< 9.59	4.795	4.8
Pyrene	NA	20	600	2.05	< 9.5	NC	< 9.56	NC	--	< 9.57	NC	< 9.55	NC	--	< 9.47	NC	< 9.47	NC	--	< 9.47	NC	< 9.48	NC	--	< 9.49	NC	< 9.59	NC	--
Polychlorinated Biphenyls (PCBs) - ug/L																													
Aroclor-1242	5	10	100	0.154	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Metals - ug/L																													
Antimony	NA	8000	80000	26.2	< 6	3	< 6	3	3.0	< 6	3	< 6	3	3.0	< 6	3	< 6	3	3.0	< 6	3	< 6	3	3.0	< 6	3	< 6	3	3.0
Arsenic	NA	900	9000	8.15	< 10	5	< 10	5	5.0	< 10	5	< 10	5	5.0	< 10	5	< 10	5	5.0	< 10	5	< 10	5	5.0	< 10	5	< 10	5	5.0
Barium	NA	50000	100000	420	75.4	--	53.7	--	64.6	396	--	287	--	341.5	399	--	187	--	293.0	420	--	304	--	362.0	335	--	179	--	257.0
Cadmium	NA	4	50	12.2	< 1	0.5	1.97	--	1.2	< 1	0.5	< 1	0.5	0.5	< 1	0.5	6.52	--	3.5	< 1	0.5	< 1	0.5	0.5	< 1	0.5	12.2	--	6.4
Chromium	NA	300	3000	1.87	1.26	--	< 5	NC	1.3	1.6	--	< 5	NC	1.6	1.61	--	< 5	NC	1.6	1.81	--	< 5	NC	1.8	1.33	--	< 5	NC	1.3
Lead	NA	10	150	4.72	< 5	2.5	< 5	2.5	2.5	< 5	2.5	< 5	2.5	2.5	< 5	2.5	< 5	2.5	2.5	< 5	2.5	< 5	2.5	2.5	< 5	2.5	< 5	2.5	2.5
Nickel	NA	200	2000	72.9	2.25	--	50.20	--	26.2	2.51	--	1.75	--	2.1	29.6	--	42.1	--	35.9	3.76	--	4.57	--	4.2	< 10	5	72.9	--	39.0
Vanadium	NA	4000	40000	1.99	< 10	NC	< 10	NC	--	< 10	NC	< 10	NC	--	< 10	NC	< 10	NC	--	< 10	NC	1.99	--	2.0	< 10	NC	< 10	NC	--
Zinc	NA	900	50000	2200	3.5	--	636	--	319.8	10.7	--	< 50	25	17.9	687	--	2200	--	1443.5	13	--	< 50	25	19.0	3.01	--	978	--	490.5

Notes:

ug/L = Micrograms per liter.

NA = No standard available.

< = Constituent is not detected; value presented is the laboratory reporting limit (RL).

** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.

Groundwater Standards from the Massachusetts Department of Environmental Protection Massachusetts Contingency Plan (MCP) reported in ug/L.

Only constituents that have been detected at least once among relevant samples are presented.

Exposure point concentration represents the temporal average concentration among groundwater samples within the disposal site boundary.

For results reported as non-detect, one-half of the RL was used as the representative concentration, except where the RL exceeds two times the maximum detected concentration (as indicated by "NC").

Orange highlighted results exceeded the MCP GW-2 Risk Characterization Standards.

Yellow highlighted results exceeded the MCP GW-3 Risk Characterization Standards.

Table 5
Method 1 Risk Characterization for Groundwater Analytical Data
175 & 189 Intervale Street, Quincy, Massachusetts

Sample ID	MCP Method 1 Standards		UCL	Maximum Detected Concentration	WCMW-9					WCMW-10					WCMW-11				
Sampling Date					10/3/13		1/27/14		EPC	10/3/13		1/28/14		EPC	10/3/13		1/27/14		EPC
Analytes	GW-2	GW-3			Result	1/2 RL	Result	1/2 RL	ug/L	Result	1/2 RL	Result	1/2 RL	ug/L	Result	1/2 RL	Result	1/2 RL	ug/L
Volatile Organic Compounds (VOCs) - ug/L																			
1,2,4-Trimethylbenzene	NA	NA	NA	3.0	< 10	NC	< 5	2.5	2.5	< 10	NC	< 5	2.5	2.5	< 10	NC	< 5	2.5	2.5
1,3-Dichlorobenzene	6000	50000	100000	11.3	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8
Benzene	1000	10000	100000	2.9	< 10	NC	< 5	2.5	2.5	< 10	NC	< 5	2.5	2.5	< 10	NC	< 5	2.5	2.5
Chlorobenzene	200	1000	10000	82.4	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8
cis-1,2-Dichloroethylene	20	50000	100000	109	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8
Isopropylbenzene (Cumene)	NA	NA	NA	1.1	< 10	NC	< 5	NC	--	< 10	NC	< 5	NC	--	< 10	NC	< 5	NC	--
Methyl tert-Butyl Ether (MTBE)	50000	50000	100000	60	3.6	--	< 5	2.5	3.1	2.9	--	< 5	2.5	2.7	< 10	5	< 5	2.5	3.8
Naphthalene**	700	20000	100000	56	< 9.47	4.735	< 9.5	4.75	4.7	< 9.48	4.74	< 9.48	4.74	4.7	< 11	5.5	< 9.47	4.735	5.1
o-Xylene	3000	5000	100000	1.8	< 10	NC	< 5	NC	--	< 10	NC	< 5	NC	--	< 10	NC	< 5	NC	--
tert-Amyl Methyl Ether (TAME)	NA	NA	NA	12	< 50	NC	< 25	NC	--	< 50	NC	< 25	NC	--	< 50	NC	< 25	NC	--
Tetrachloroethylene	50	30000	100000	17	< 10	5	9.61	--	7.3	< 10	5	< 5	2.5	3.8	< 10	5	9.11	--	7.1
Trichloroethylene	5	5000	50000	23.9	5.33	--	3.7	--	4.5	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8
Vinyl Chloride	2	50000	100000	11.4	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8	< 10	5	< 5	2.5	3.8
Volatile Petroleum Hydrocarbons (VPH) - ug/L																			
C5-C8 Aliphatics (adjusted)	3000	50000	100000	27.5	< 50	25	1.83	--	13.4	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8
C9-C12 Aliphatics (adjusted)	5000	50000	100000	100	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8
C9-C10 Aromatics	4000	50000	100000	300	< 50	25	1.74	--	13.4	< 50	25	< 5	2.5	13.8	< 50	25	< 5	2.5	13.8
Extractable Petroleum Hydrocarbons (EPH) - ug/L																			
C9-C18 Aliphatics	5000	50000	100000	181	< 47.3	23.65	10.9	--	17.3	10.3	--	< 47.4	23.7	17.0	< 55.2	27.6	< 47.3	23.65	25.6
C19-C36 Aliphatics	NA	50000	100000	24.3	9.61	--	< 47.5	23.75	16.7	< 47.4	23.7	< 47.4	23.7	23.7	15.8	--	< 47.3	23.65	19.7
C11-C22 Aromatics (Adjusted)	50000	5000	100000	490	< 50	25	< 50	25	25.0	< 50	25	< 50	25	25.0	< 50	25	< 50	25	25.0
2-Methylnaphthalene	2000	20000	100000	33	< 9.47	4.735	< 9.5	4.75	4.7	< 9.48	4.74	< 9.48	4.74	4.7	< 11	5.5	< 9.47	4.735	5.1
Acenaphthene	NA	10000	100000	98.3	< 9.47	4.735	< 9.5	4.75	4.7	< 9.48	4.74	< 9.48	4.74	4.7	< 11	5.5	< 9.47	4.735	5.1
Fluoranthene	NA	200	2000	3.88	< 9.47	NC	< 9.5	NC	--	< 9.48	NC	< 9.48	NC	--	< 11	NC	< 9.47	NC	--
Fluorene	NA	40	400	43.4	< 9.47	4.735	< 9.5	4.75	4.7	< 9.48	4.74	< 9.48	4.74	4.7	< 11	5.5	< 9.47	4.735	5.1
Phenanthrene	NA	10000	100000	47.1	1.93	--	< 9.5	4.75	3.3	< 9.48	4.74	< 9.48	4.74	4.7	< 11	5.5	< 9.47	4.735	5.1
Pyrene	NA	20	600	2.05	< 9.47	NC	< 9.5	NC	--	< 9.48	NC	< 9.48	NC	--	< 11	NC	< 9.47	NC	--
Polychlorinated Biphenyls (PCBs) - ug/L																			
Aroclor-1242	5	10	100	0.154	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dissolved Metals - ug/L																			
Antimony	NA	8000	80000	26.2	< 6	3	< 6	3	3.0	< 6	3	< 6	3	3.0	< 6	3	< 6	3	3.0
Arsenic	NA	900	9000	8.15	6.41	--	8.15	--	7.3	< 10	5	< 10	5	5.0	5.63	--	< 10	5	5.3
Barium	NA	50000	100000	420	337	--	176	--	256.5	351	--	153	--	252.0	160	--	48.4	--	104.2
Cadmium	NA	4	50	12.2	< 1	0.5	1.7	--	1.1	< 1	0.5	< 1	0.5	0.5	< 1	0.5	< 1	0.5	0.5
Chromium	NA	300	3000	1.87	1.6	--	< 5	NC	1.6	1.87	--	< 5	NC	1.9	1.72	--	< 5	NC	1.7
Lead	NA	10	150	4.72	< 5	2.5	< 5	2.5	2.5	< 5	2.5	< 5	2.5	2.5	< 5	2.5	< 5	2.5	2.5
Nickel	NA	200	2000	72.9	8.62	--	24.2	--	16.4	2.57	--	6.17	--	4.4	3.89	--	11.4	--	7.6
Vanadium	NA	4000	40000	1.99	< 10	NC	< 10	NC	--	< 10	NC	< 10	NC	--	< 10	NC	< 10	NC	--
Zinc	NA	900	50000	2200	63.8	--	666	--	364.9	4.31	--	< 50	25	14.7	13.2	--	374	--	193.6

Notes:

ug/L = Micrograms per liter.

NA = No standard available.

< = Constituent is not detected; value presented is the laboratory reporting limit (RL).

** = Constituent was analyzed via multiple methods. The highest detected concentration is presented.

Groundwater Standards from the Massachusetts Department of Environmental Protection Massachusetts Contingency Plan (MCP) reported in ug/L.

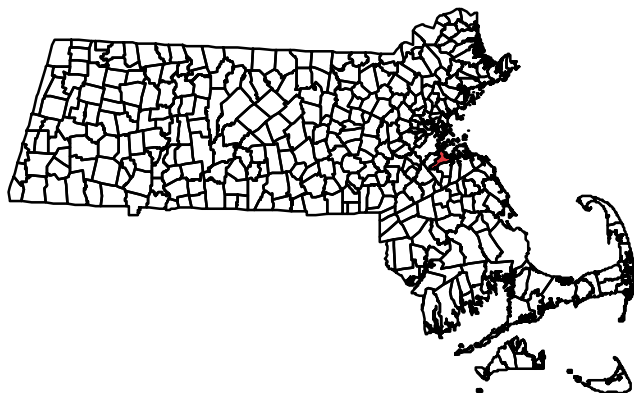
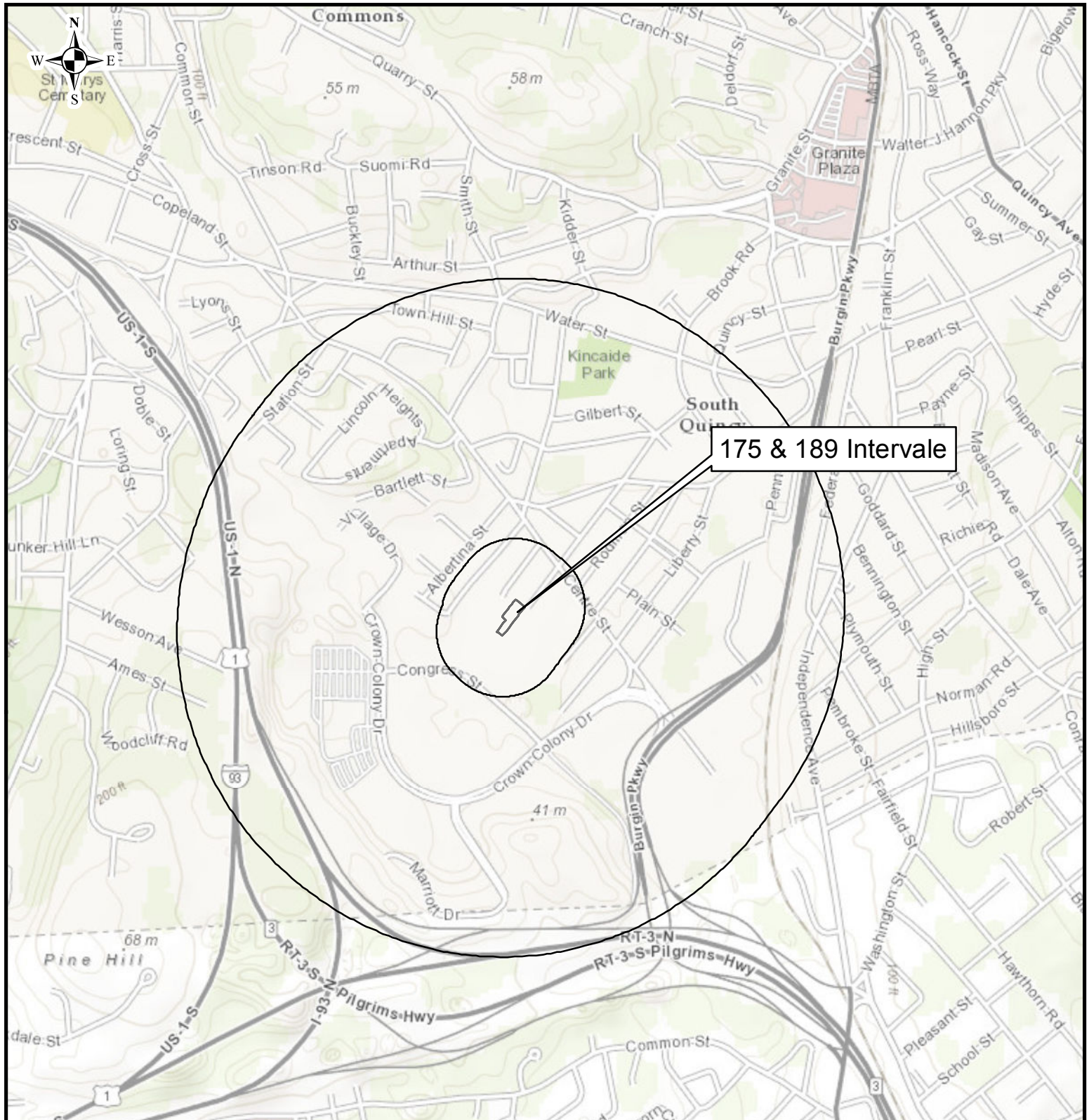
Only constituents that have been detected at least once among relevant samples are presented.

Exposure point concentration represents the temporal average concentration among groundwater samples within the disposal site boundary.

For results reported as non-detect, one-half of the RL was used as the representative concentration, except where the RL exceeds two times the maximum detected concentration (as indicated by "NC").

Orange highlighted results exceeded the MCP GW-2 Risk Characterization Standards.

Yellow highlighted results exceeded the MCP GW-3 Risk Characterization Standards.



**175 & 189 Intervale Street
Quincy, MA**

**Site Locus with
500-ft & 0.5-mile Radii**

Figure 1



SCALE: 1" = 1,500'

DOC: SiteLocus.MXD

DATE: October 2014

JOB NO.: 226332

DRAWN BY: RS

SOURCE: MassGIS









WOODARD
& CURRAN







Chromium Concentration

●

≤ 100 mg/kg or Non Detect

●

> 100 mg/kg

Site Features

Surveyed Fence Line

Disposal Site Boundary

Areas of Interest

Tax/Property Boundaries

Notes:

1. The S-1/ GW-2 or GW-3 standard for Chromium is 100 mg/kg. (MCP; 2014)

2. Orthophotography provided by ESRI.

3. Tax/Property Boundaries from MassGIS.

4. Analytical results presented in mg/kg. Depth of sample in feet below ground surface presented in parenthesis.

5. (J,J-,J+,UJ) Analytical results qualified as estimated based on data validation. See data validation summaries for additional information.





Mercury Concentration

- ≤ 20.0 mg/kg or Non Detect
- > 20.0 mg/kg

- Site Features
- Surveyed Fence Line
 - Disposal Site Boundary
 - Areas of Interest
 - Tax/Property boundaries

- Notes:
- The S-1/ GW-2 or GW-3 standard for Mercury is 20 mg/kg. (MCP; 2014)
 - Orthophotography provided by ESRI.
 - Tax/Property boundaries from MassGIS.
 - Analytical results presented in mg/kg. Depth of sample in feet below ground surface presented in parenthesis.
 - (J,J-,J+,UJ) Analytical results qualified as estimated based on data validation. See data validation summaries for additional information.









Antimony Concentration

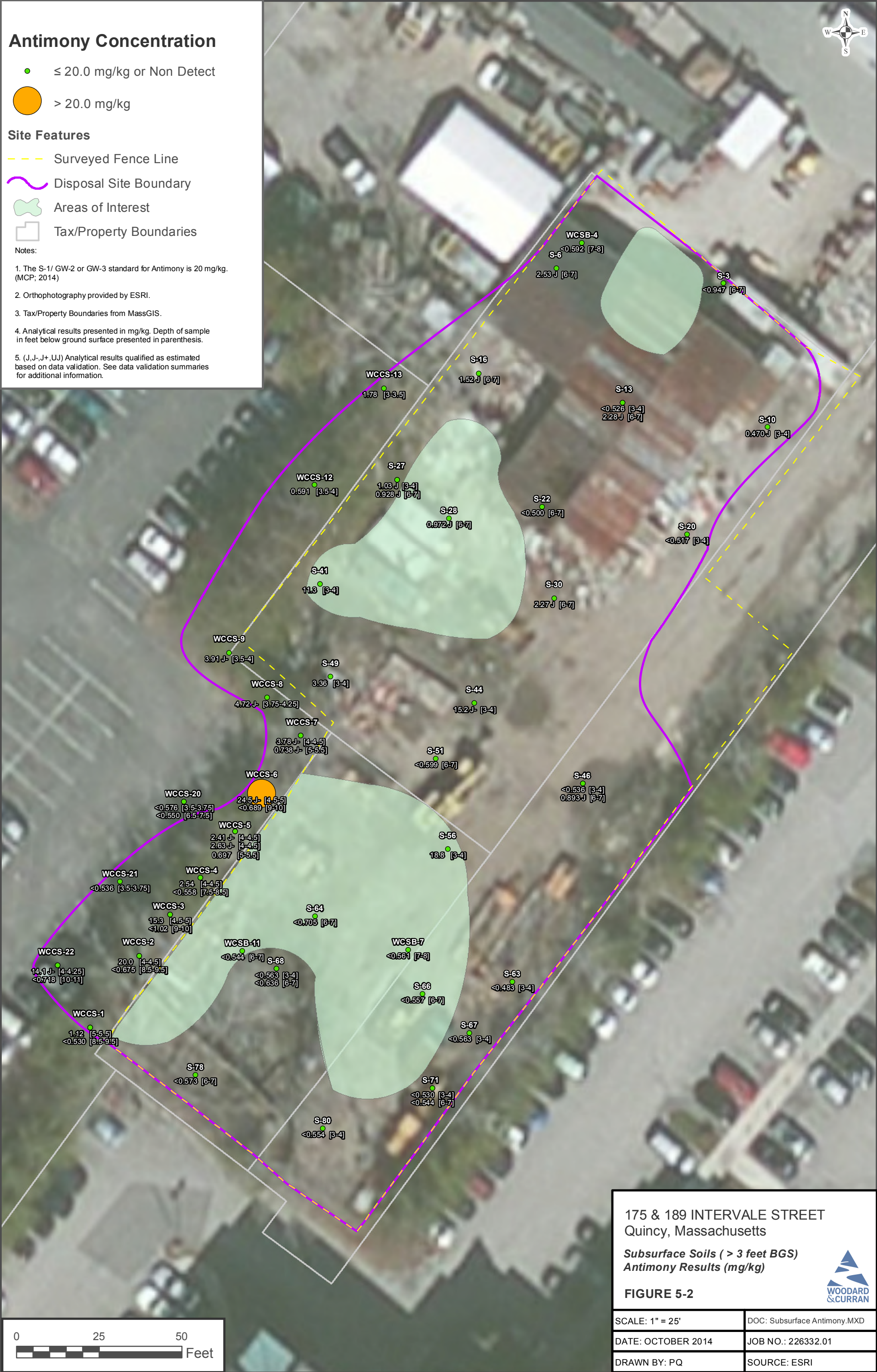
- ≤ 20.0 mg/kg or Non Detect
- > 20.0 mg/kg

Site Features

- Surveyed Fence Line
- Disposal Site Boundary
- Areas of Interest
- Tax/Property Boundaries

Notes:

- The S-1/ GW-2 or GW-3 standard for Antimony is 20 mg/kg. (MCP; 2014)
- Orthophotography provided by ESRI.
- Tax/Property Boundaries from MassGIS.
- Analytical results presented in mg/kg. Depth of sample in feet below ground surface presented in parenthesis.
- (J,J-,J+,UU) Analytical results qualified as estimated based on data validation. See data validation summaries for additional information.



Arsenic Concentration

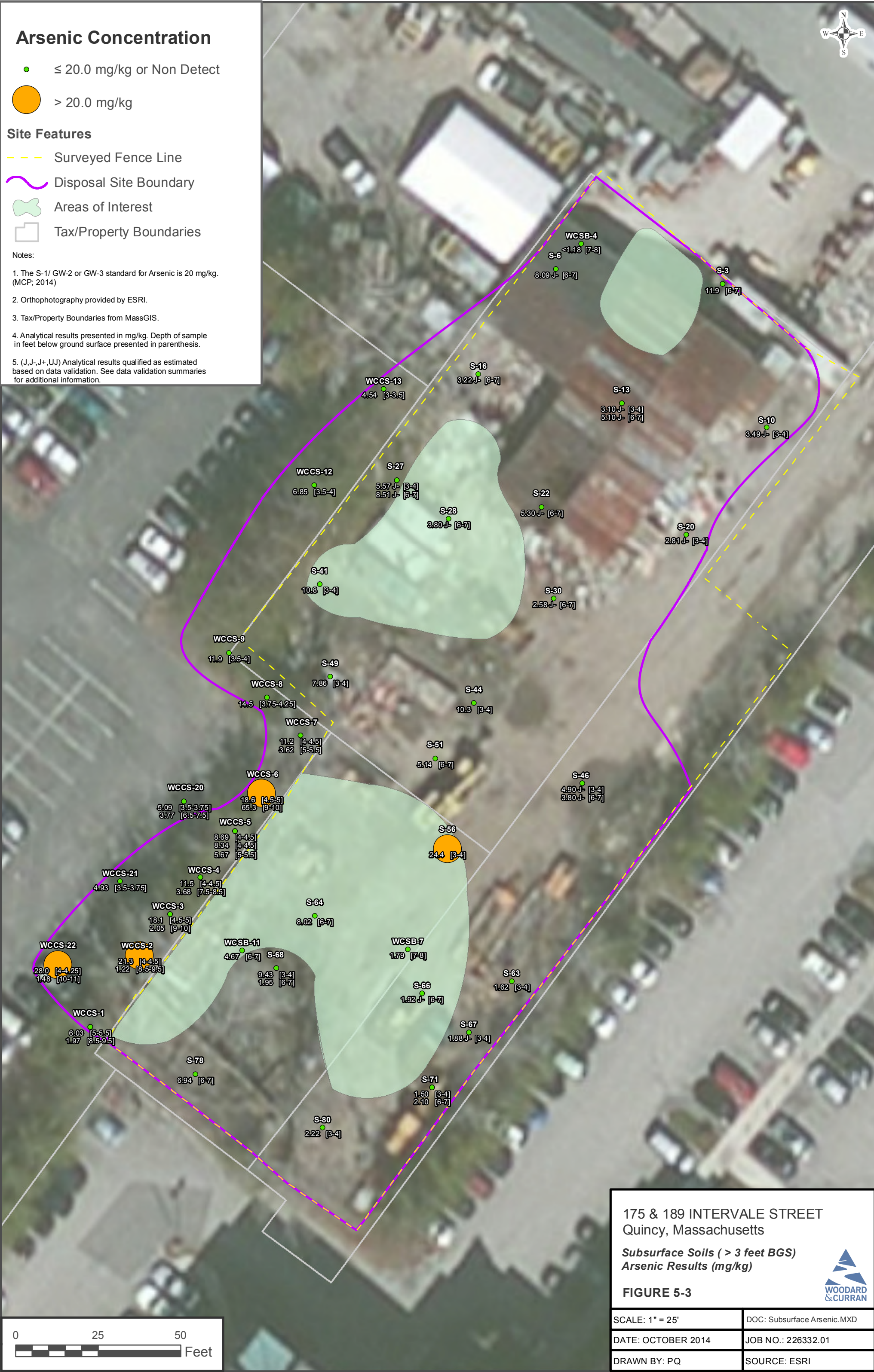
- ≤ 20.0 mg/kg or Non Detect
- > 20.0 mg/kg

Site Features

- Surveyed Fence Line
- Disposal Site Boundary
- Areas of Interest
- Tax/Property Boundaries

Notes:

- 1. The S-1/ GW-2 or GW-3 standard for Arsenic is 20 mg/kg. (MCP; 2014)
- 2. Orthophotography provided by ESRI.
- 3. Tax/Property Boundaries from MassGIS.
- 4. Analytical results presented in mg/kg. Depth of sample in feet below ground surface presented in parenthesis.
- 5. (J,J-,J+,UJ) Analytical results qualified as estimated based on data validation. See data validation summaries for additional information.



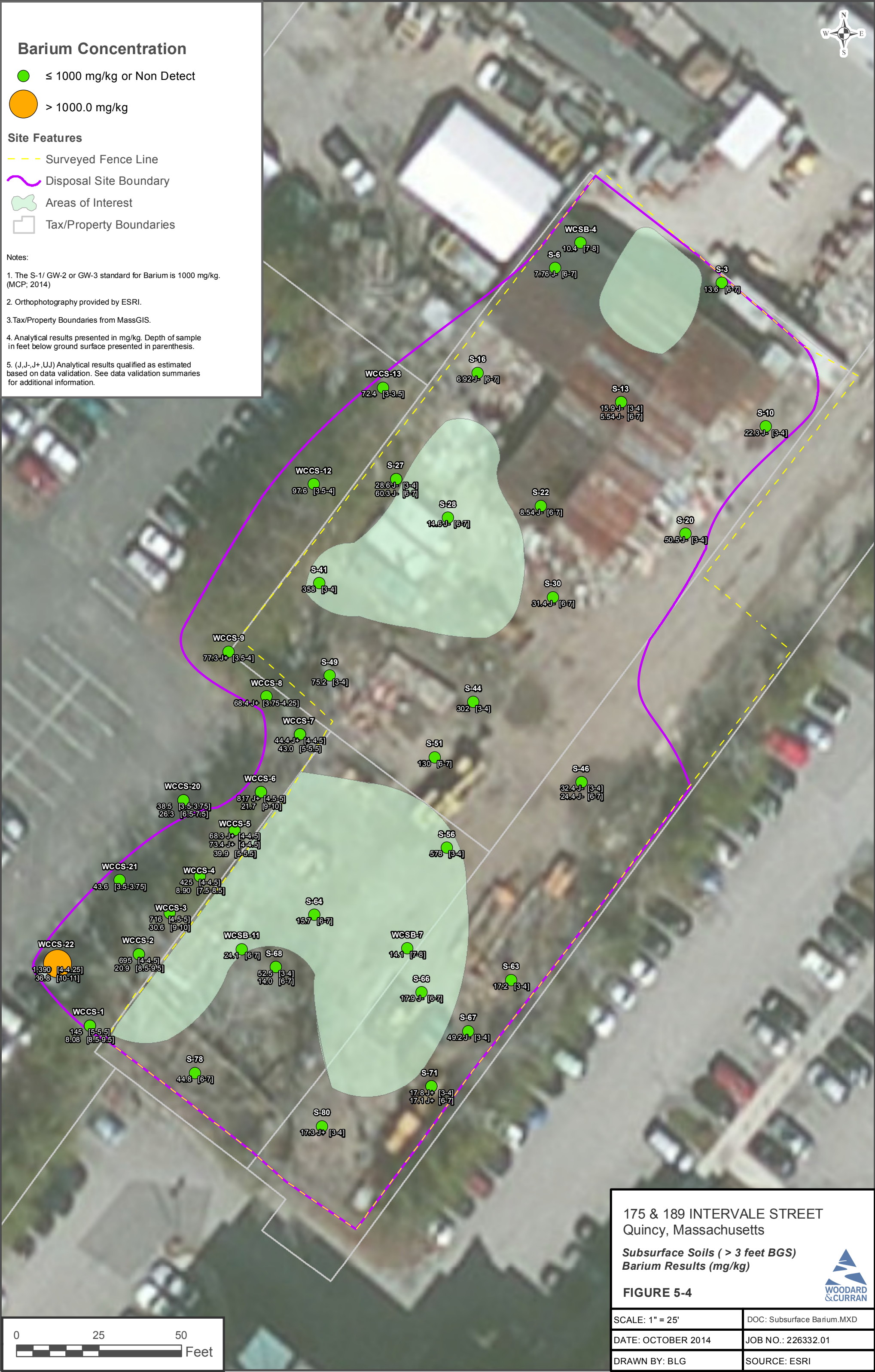
Barium Concentration

- ≤ 1000 mg/kg or Non Detect
- > 1000.0 mg/kg

Site Features

- Surveyed Fence Line
- Disposal Site Boundary
- Areas of Interest
- Tax/Property Boundaries

- Notes:
- The S-1/ GW-2 or GW-3 standard for Barium is 1000 mg/kg. (MCP: 2014)
 - Orthophotography provided by ESRI.
 - Tax/Property Boundaries from MassGIS.
 - Analytical results presented in mg/kg. Depth of sample in feet below ground surface presented in parenthesis.
 - (J,J-,J+,UJ) Analytical results qualified as estimated based on data validation. See data validation summaries for additional information.



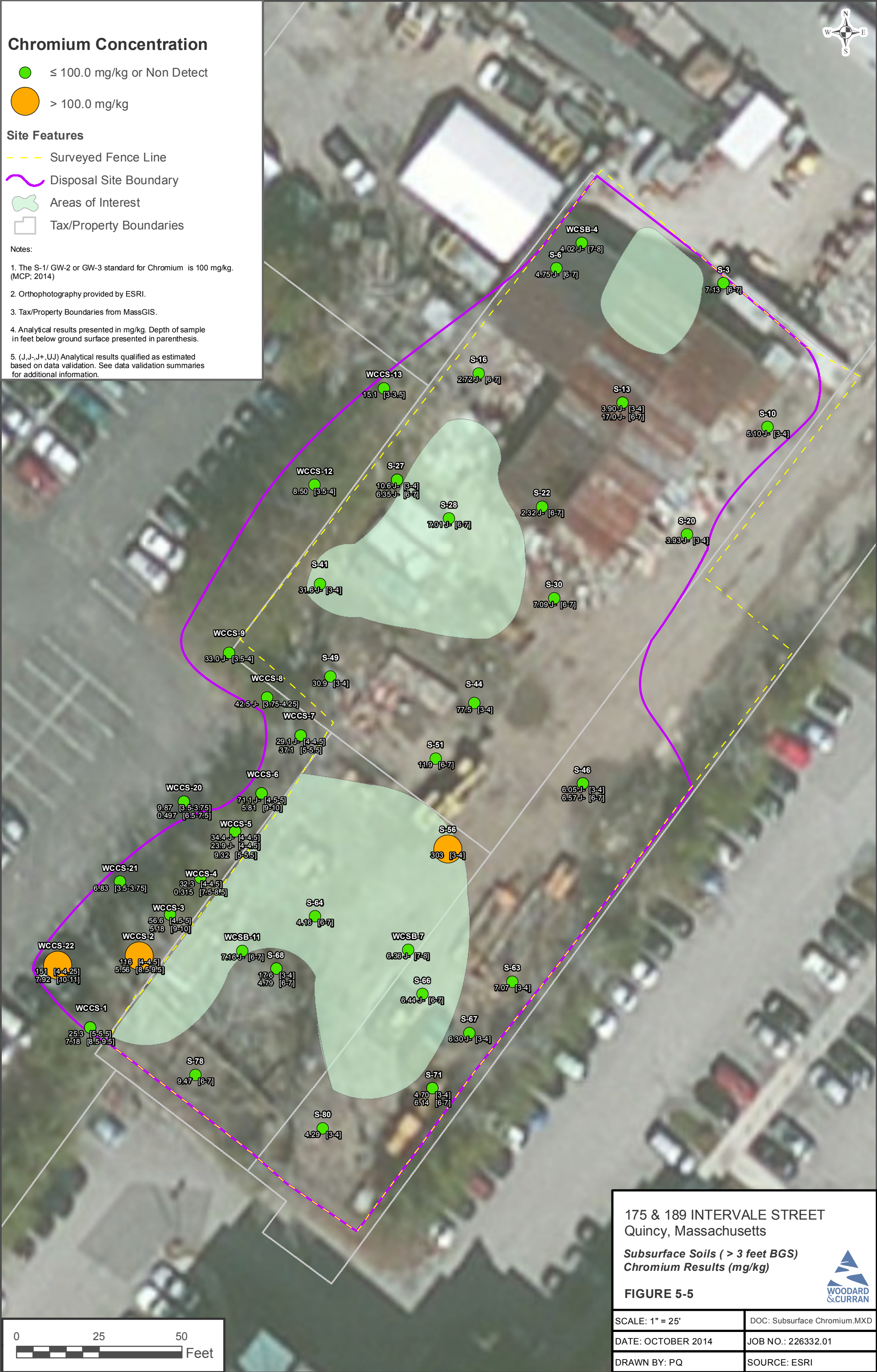
Chromium Concentration

- ≤ 100.0 mg/kg or Non Detect
- > 100.0 mg/kg

Site Features

- Surveyed Fence Line
- Disposal Site Boundary
- Areas of Interest
- Tax/Property Boundaries

- Notes:
- The S-1/ GW-2 or GW-3 standard for Chromium is 100 mg/kg. (MCP; 2014)
 - Orthophotography provided by ESRI.
 - Tax/Property Boundaries from MassGIS.
 - Analytical results presented in mg/kg. Depth of sample in feet below ground surface presented in parenthesis.
 - (J,J-,J+,UJ) Analytical results qualified as estimated based on data validation. See data validation summaries for additional information.



Lead Concentration

- ≤ 200 mg/kg or Non Detect
- > 200 mg/kg

Site Features

- Surveyed Fence Line
- Disposal Site Boundary
- Areas of Interest
- Tax/Property Boundaries

- Notes:
- The S-1/ GW-2 or GW-3 standard for Mercury is 200 mg/kg. (MCP; 2014)
 - Orthophotography provided by ESRI.
 - Tax/Property Boundaries from MassGIS.
 - Analytical results presented in mg/kg. Depth of sample in feet below ground surface presented in parenthesis.
 - (J,J+,J+,UJ) Analytical results qualified as estimated based on data validation. See data validation summaries for additional information.



Mercury Concentration

- ≤ 20.0 mg/kg or Non Detect
- > 20.0 mg/kg

Site Features

- Surveyed Fence Line
- Disposal Site Boundary
- Areas of Interest
- Tax/Property Boundaries

Notes:

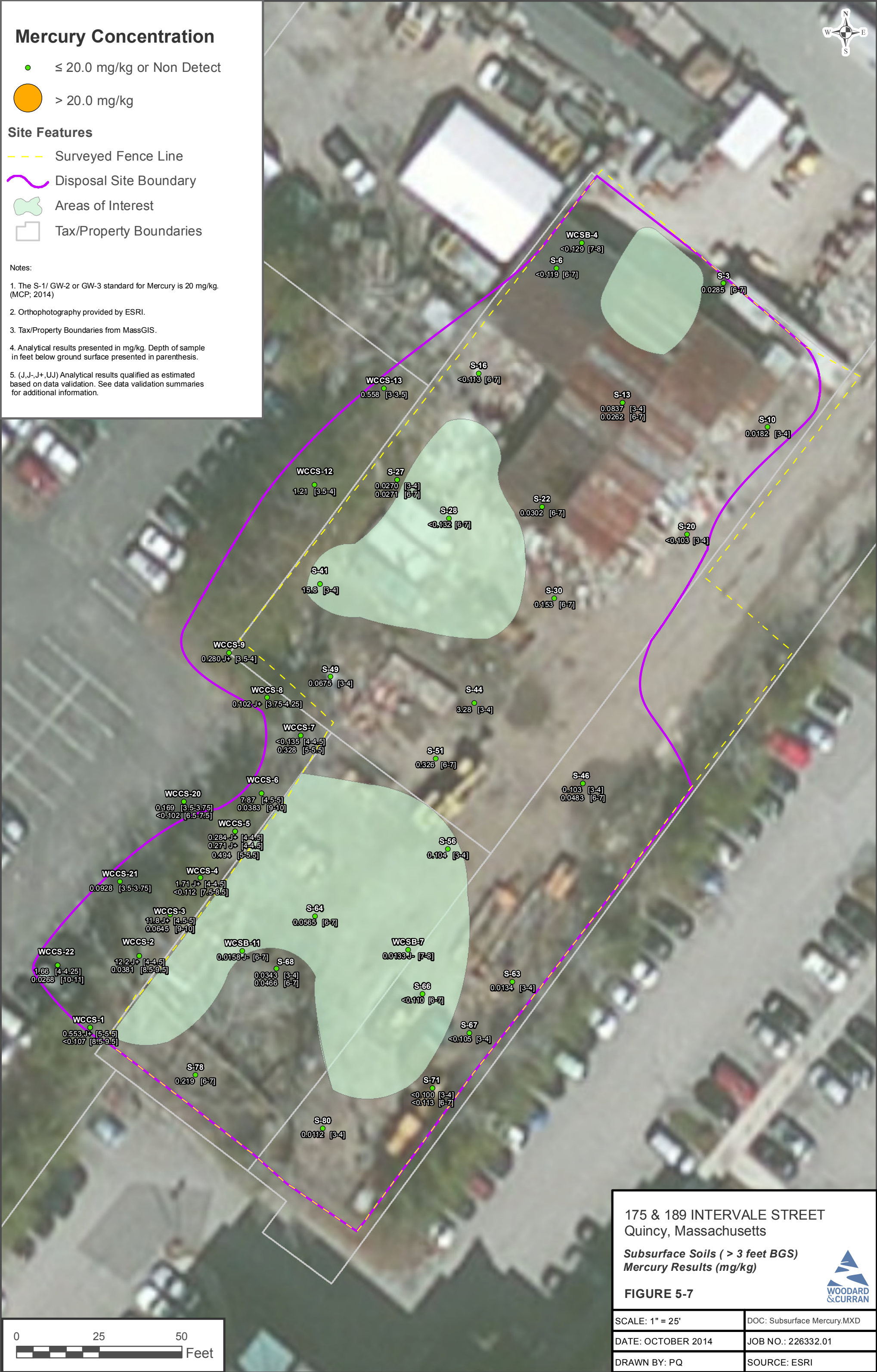
1. The S-1/ GW-2 or GW-3 standard for Mercury is 20 mg/kg. (MCP; 2014)

2. Orthophotography provided by ESRI.

3. Tax/Property Boundaries from MassGIS.

4. Analytical results presented in mg/kg. Depth of sample in feet below ground surface presented in parenthesis.

5. (J,J-,J+,UJ) Analytical results qualified as estimated based on data validation. See data validation summaries for additional information.



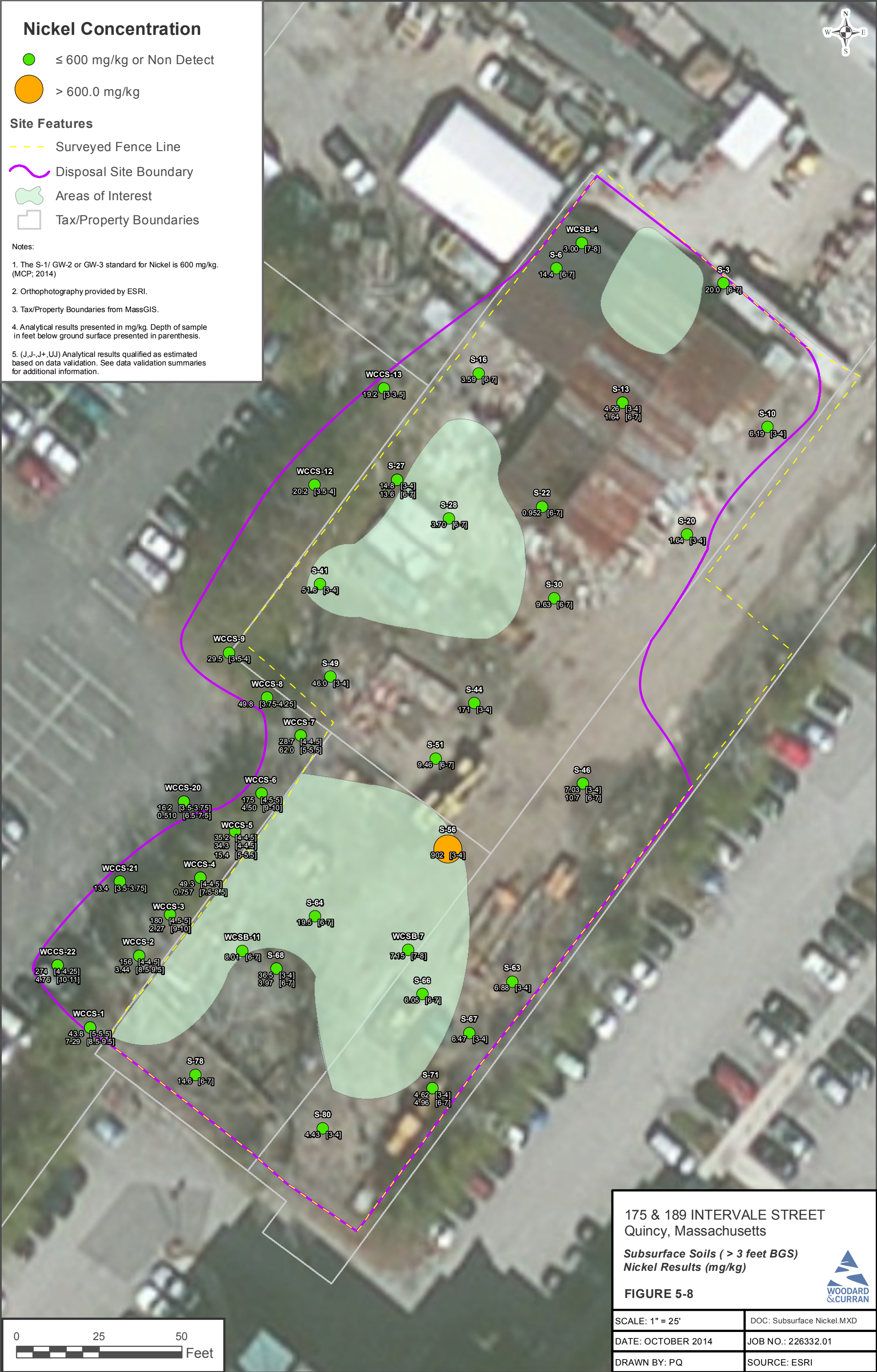
Nickel Concentration

- ≤ 600 mg/kg or Non Detect
- > 600.0 mg/kg

Site Features

- Surveyed Fence Line
- Disposal Site Boundary
- Areas of Interest
- Tax/Property Boundaries

- Notes:
- The S-1/ GW-2 or GW-3 standard for Nickel is 600 mg/kg. (MCP; 2014)
 - Orthophotography provided by ESRI.
 - Tax/Property Boundaries from MassGIS.
 - Analytical results presented in mg/kg. Depth of sample in feet below ground surface presented in parenthesis.
 - (J,J-,J+,UJ) Analytical results qualified as estimated based on data validation. See data validation summaries for additional information.



Zinc Concentration

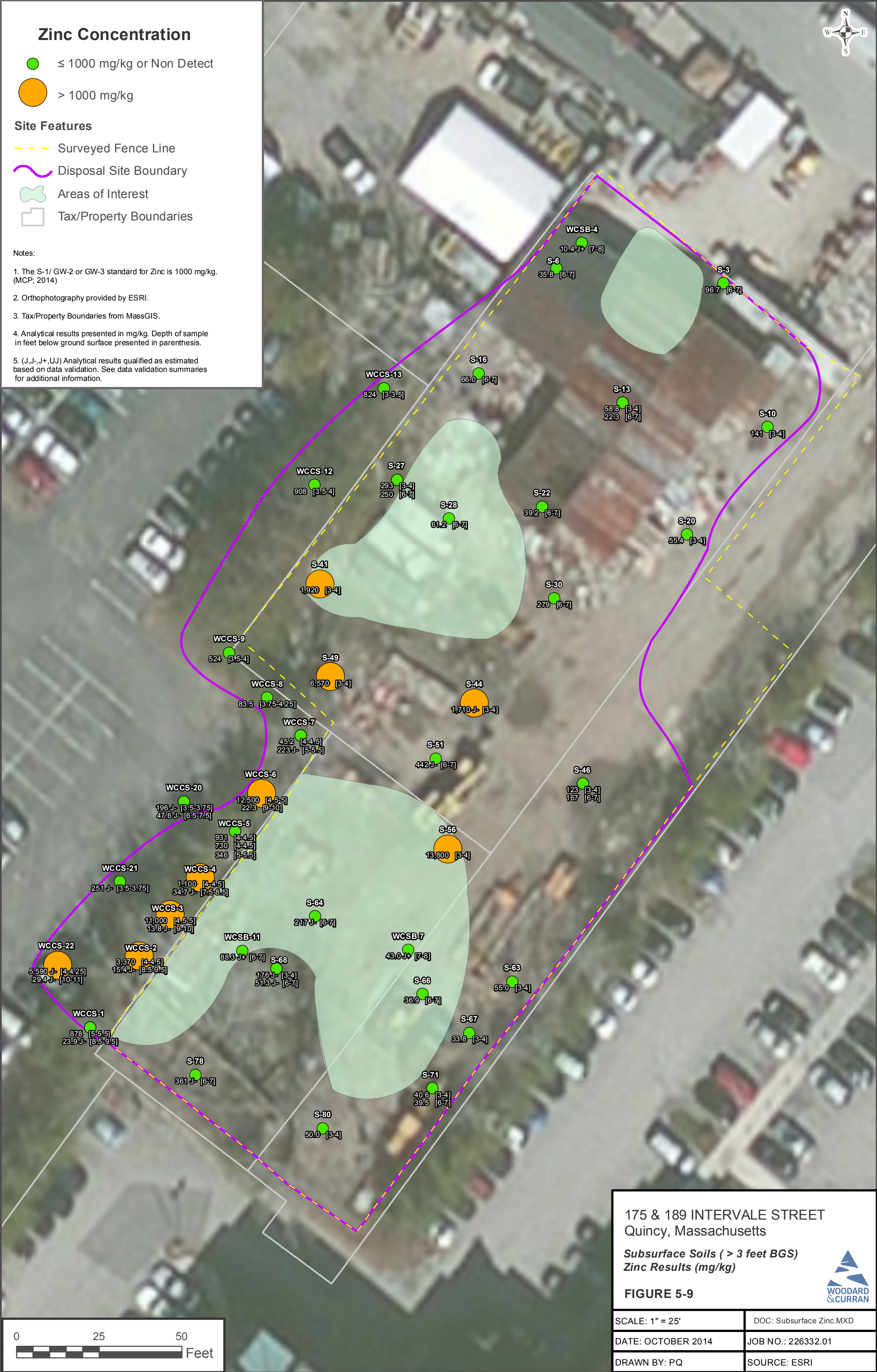
- ≤ 1000 mg/kg or Non Detect
- > 1000 mg/kg

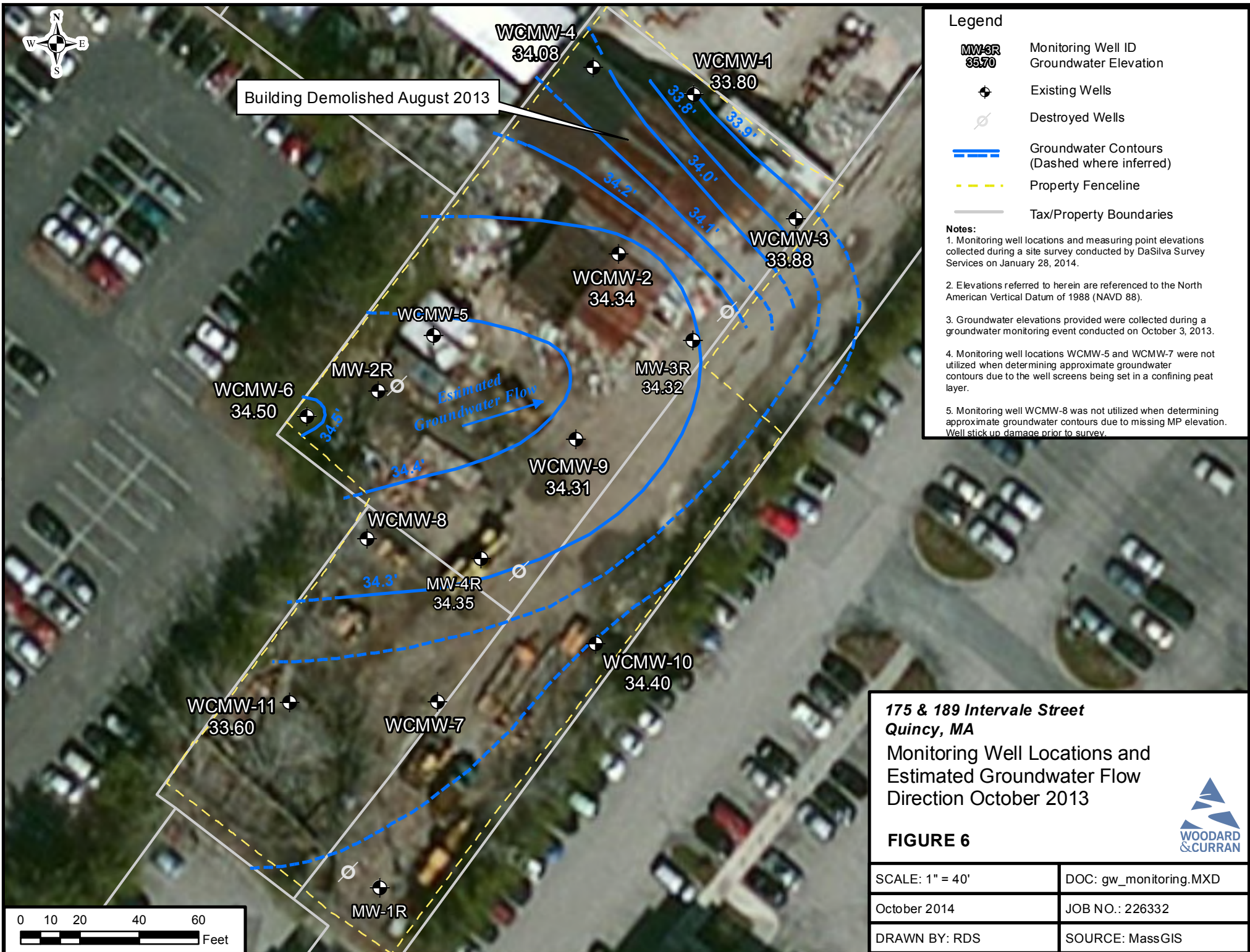
Site Features

- Surveyed Fence Line
- Disposal Site Boundary
- Areas of Interest
- Tax/Property Boundaries

Notes:

1. The S-1/ GW-2 or GW-3 standard for Zinc is 1000 mg/kg. (MCP; 2014)
2. Orthophotography provided by ESRI.
3. Tax/Property Boundaries from MassGIS.
4. Analytical results presented in mg/kg. Depth of sample in feet below ground surface presented in parenthesis.
5. (J,J-,J+,UJ) Analytical results qualified as estimated based on data validation. See data validation summaries for additional information.





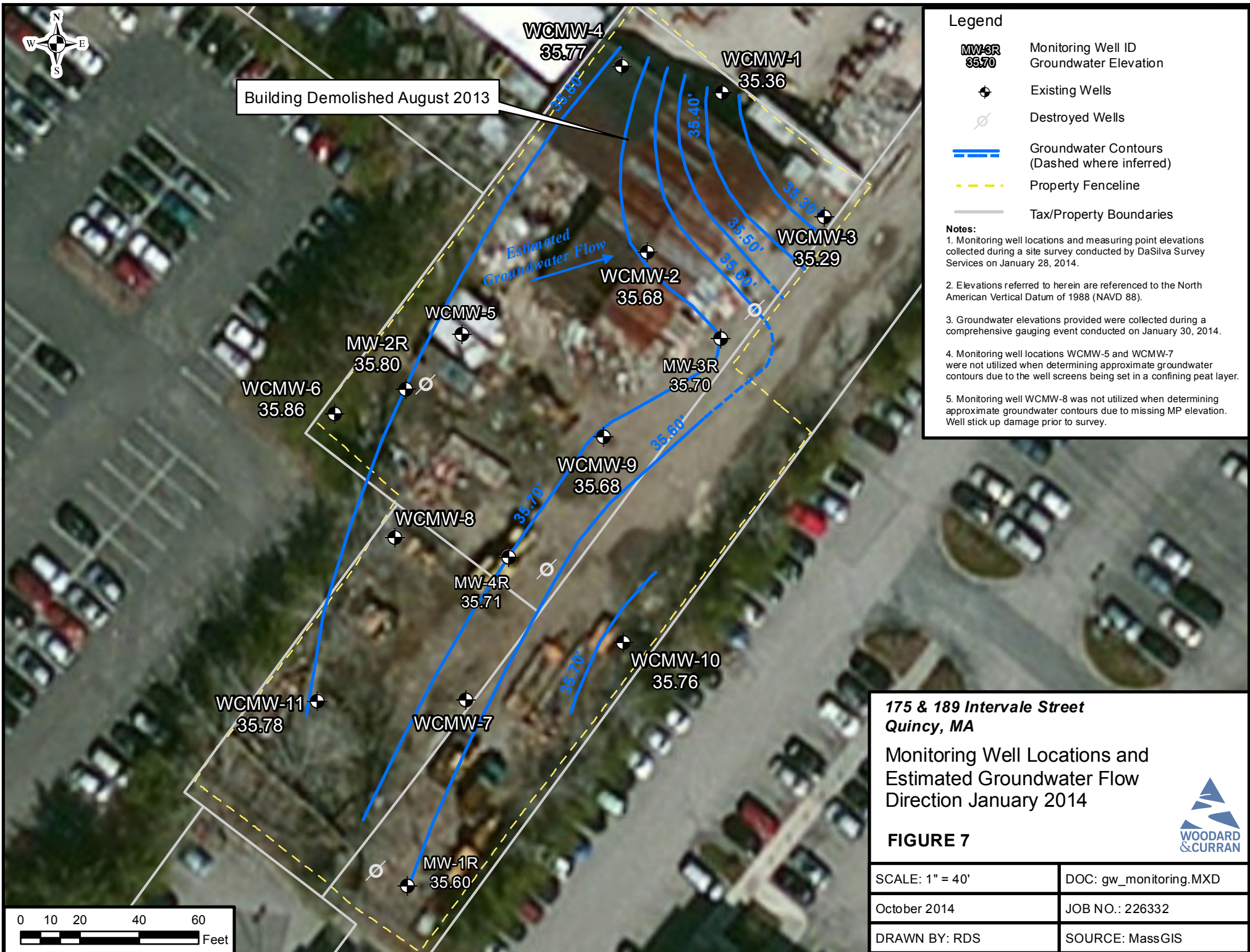
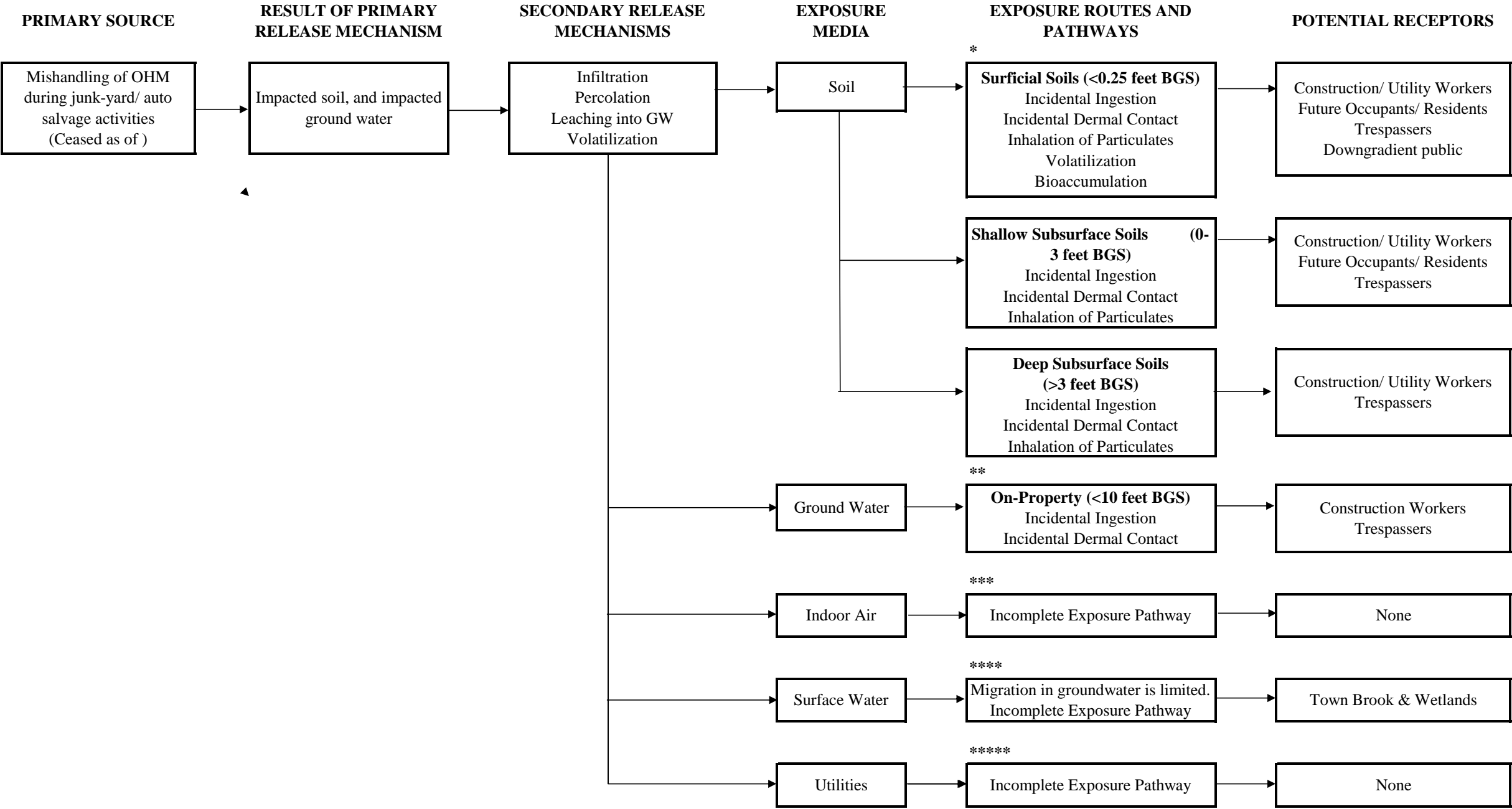


FIGURE 8
CONCEPTUAL SITE MODEL
City of Quincy
175 & 189 Intervale Street
Quincy, Massachusetts



NOTES:

- 1. * = Based upon depth to soil impacts.
- 2. ** = Based upon depth to ground water.
- 3. *** = Based upon depth to ground water, ground water analytical data that are below MCP Method 1 Risk Characterization Standards, and ground water at the disposal site is not used for drinking water (GW-1) and will not likely be used as drinking water in the future based upon available information provided in this report.
- 4. **** = The nearest hydraulically downgradient surface water body is Town Brook and its accompanying wetlands located approximately 0.25 mile east of the disposal site. Based upon concentrations of constituents in ground water, significant impacts are not present. Surface water will not likely be impacted by the OHM because solid phase contamination will naturally attenuate during groundwater migration.
- 5. ***** = Underground utilities are not known to exist within the disposal site boundary.
- 6. BGS = below ground surface.

APPENDIX A PUBLIC NOTIFICATION DOCUMENTATION



October 31, 2014

Linda Montillio
A Monti Grantie Company Inc.
266 Centre Street
Quincy, MA 02169

Re: Phase II Comprehensive Site Assessment Report & Phase III Remedial Action Plan
175 & 189 Intervale Street
Quincy, Massachusetts
MassDEP Release Tracking Number 3-2524

Dear Ms. Montillio:

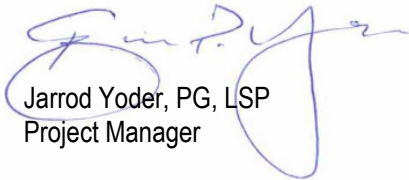
This letter is being sent to you to fulfill the public notification requirements established by the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). The public notification provisions of the MCP require that owners of properties located within the disposal site boundary from a release of oil or hazardous material be notified of the submittal of a Phase II Comprehensive Site Assessment (CSA) Report & Phase III Remedial Action Plan (RAP). This letter specifically pertains to the property located 40 Vernon Street in Quincy, Massachusetts which is located within the disposal site boundary associated with a release of oil and hazardous material at the 175 & 189 Intervale Street property in Quincy, Massachusetts. A summary of findings and conclusions for these reports and the Site Plan are attached to this letter for your reference.

A complete copy of the Phase II CSA Report & Phase III RAP will be submitted to the Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office (NERO) located at 205B Lowell Street in Wilmington, Massachusetts after November 5, 2014 and may be available for review on the MassDEP file viewer website (http://public.dep.state.ma.us/wsc_viewer/main.aspx). If it is not available on the MassDEP website, please contact the MassDEP NERO to schedule a file review.

If you have any questions regarding this notification, please feel free to contact me at (978) 557-8150.

Sincerely,

WOODARD & CURRAN INC.



Jarrod Yoder, PG, LSP
Project Manager

226332.01

Enclosures: BWSC122
Phase II and Phase III Summary of Findings and Statement of Conclusions
Site Plan

cc: MassDEP – Northeast Regional Office



ENCLOSURES: BWSC122

**PHASE II & PHASE III SUMMARY OF FINDINGS
AND STATEMENT OF CONCLUSIONS**

SITE PLAN



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC122

This notice is related to:
Release Tracking Number

INFORMATIONAL NOTICE TO PROPERTY OWNERS

As Required by 310 CMR 40.1406 of the Massachusetts Contingency Plan (MCP)

-

A. DISPOSAL SITE ADDRESS: (associated with Release Tracking Number provided above)

1. Street Address: _____
2. City/Town: _____ 3. ZIP Code: _____
4. Assessor's Parcel ID: _____

B. THIS NOTICE IS BEING PROVIDED TO THE FOLLOWING PROPERTY OWNER:

1. Name of Property Owner: _____
2. Address of Property For Which This Notice is Being Provided: (property owned by person named in B1)
- a. Street Address: _____
- b. City/Town: _____ c. ZIP Code: _____
3. Assessor's Parcel ID: _____

C. THIS NOTICE IS BEING GIVEN : (check one)

- ☐ 1. Upon Completion of a Phase II Comprehensive Site Assessment.
- ☐ 2. Upon Submittal of a Permanent or Temporary Solution Statement (i.e., Site Closure Report).
- ☐ 3. Upon Completion of Additional Investigation showing that Oil or Hazardous Material is not Present at the Property.

D. DESCRIPTION OF OIL AND/OR HAZARDOUS MATERIAL PRESENT OR LIKELY TO BE PRESENT AT THE PROPERTY :
(check all that apply)

AFFECTED ENVIRONMENTAL MEDIA

PRINCIPAL CHEMICAL(S) PRESENT

- | | |
|---|-------|
| <input type="checkbox"/> 1. Soil | _____ |
| <input type="checkbox"/> 2. Groundwater | _____ |
| <input type="checkbox"/> 3. Surface Water | _____ |
| <input type="checkbox"/> 4. Sediment | _____ |
| <input type="checkbox"/> 5. Indoor Air | _____ |
| <input type="checkbox"/> 6. Soil Gas | _____ |
| <input type="checkbox"/> 7. Other: _____ | _____ |
| (specify) | |

E. ATTACHMENTS PROVIDED WITH THIS NOTICE, AS REQUIRED BY 310 CMR 40.1406:

- ☐ 1. A Copy of the Map Showing or a Description Describing the Area where the Oil and/or Hazardous Material is or is likely to be Present.
- ☐ 2. A Copy of the Phase II Comprehensive Site Assessment or Permanent or Temporary Solution Statement Conclusions.
- ☐ 3. Specify the category of Solution that applies to the Disposal Site.
- ☐ 1. Permanent Solution with No Conditions.
- ☐ 2. Permanent Solution with Conditions.
- ☐ i. An Activity and Use Limitation has been implemented.
- ☐ ii. An Activity and Use Limitation has not been implemented.
- ☐ 3. Temporary Solution.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC122

This notice is related to:
Release Tracking Number

INFORMATIONAL NOTICE TO PROPERTY OWNERS

As Required by 310 CMR 40.1406 of the Massachusetts Contingency Plan (MCP)

 -

F. CONTACT INFORMATION RELATING TO THE PARTY PROVIDING THIS NOTICE:

1. Name of Organization: _____
2. Contact First Name: _____ 3. Last Name: _____
4. Street: _____ 5. Title: _____
6. City/Town: _____ 7. State: _____ 8. ZIP Code: _____
9. Telephone: _____ 10. Email: _____

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1406. The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party(ies) who is/are addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form.

PURPOSE OF THIS NOTICE

Parties who are taking actions to respond to releases of oil or hazardous material to the environment are required by state regulations (referred to above) to notify the owners of property where the oil or hazardous material is or is likely to be present. These same parties are also required to notify property owners upon completion of actions to address the oil or hazardous material, or if additional investigations show that the oil or hazardous material is not present at a property. **Section C** on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time.

INFORMATION RELATED TO YOUR PROPERTY

Section D on the reverse side of this form indicates the type(s) of oil or hazardous material that is or is likely to be present at your property, and the environmental medium (e.g., soil or groundwater) where it is or is likely to be present. **Please note** that when an investigation indicates that the oil or hazardous material is or is likely to be present at your property, this does not mean that the oil or hazardous material is posing a health risk to you. Parties who are taking actions to address oil and hazardous material releases are required by state regulations to adequately investigate these releases and take necessary actions to ensure that affected properties meet standards that are protective of human health and the environment.

ATTACHED MAP OR DESCRIPTION AND REPORT CONCLUSIONS

The party providing this notice to you is required to attach a map or description that indicates the boundaries of the area where the oil or hazardous material is or is likely to be present, and the conclusions of the site investigation or closure report (**Section E**). These attachments should give you additional information about the nature and location of the oil or hazardous material with respect to your property.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>.

For more information regarding this notice, you may contact the party listed in **Section F** of this form. Information about the disposal site identified in **Section A** is also available in files at the Massachusetts Department of Environmental Protection.

See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

PHASE II CSA CONCLUSIONS

This section summarizes the findings of the Phase II CSA for 175 & 189 Intervale Street in Quincy, Massachusetts. Historical research and field investigation activities conducted at the disposal site have led to the following conclusions:

- The disposal site, identified as RTN 3-2524 comprises approximately 36,000 square feet (0.83 acres) across 175 & 189 Intervale Street, the paper street, a portion of 500 Congress Street and a portion of 40 Vernon Street in Quincy, Massachusetts.
- Earliest obtainable records indicate that properties at 175 & 189 Intervale Street have been utilized as a junk yard and metal scrapping facility since the early 1940's.
- PDM Metals, Inc. occupied the Property beginning in June 1971 when the land was purchased by Henry P. Gregoire, Trustee of the Gregoire Family Trust. PDM Metals continued operations at the property until the mid-1990's when the Property was abandoned by the Gregoire Family Trust. The property was seized by the City via tax foreclosure in 2009 and has maintained the exempt status under M.G.L. 21E, Section 2.
- The Property was used by PDM Metals for auto salvage, metal scrapping, transformer cutting, manhole recoating and general materials storage. Improper procedures and mishandling of materials during these former operations are the sources of the conditions of OHM contamination at the Property.
- Potential conditions of OHM contamination were noted by MassDEP (formerly MassDEQE) in 1986, following a fire involving a 55-gallon drum of apparent waste solvent. Due to the length of operations occurring prior to and following the initial discovery of the contamination, it cannot be determined if releases may have occurred at different times, with different materials, and at different magnitudes.
- Hazardous materials left over from operations at the Property were collected, removed, and transported off-Property for disposal at an approved facility by the City in December 2012 and January 2013. All known sources of OHM have been removed or eliminated and historical operations and practices are no longer active at the Property.
- The former building was demolished in August/September 2013. During demolition activities, PCB-impacts building foundation and soil were encountered and a RAM Plan was prepared to remove the impacted foundation and soil in the top 3 feet to reduce site risks. The RAM was modified to conduct a bench-scale and pilot scale test to evaluate potential options to stabilize leachable lead and chlordane detected in disposal samples.
- During Phase II CSA activities, soil samples were collected from off-Property locations to better define the nature and extent of impacts from historical PDM, Inc. activities. Two off-property location (40 Vernon Street and 500 Congress Street) were approached by the City to collect samples under the Massachusetts Brownfields program. 120-day reporting conditions were identified at 40 Vernon Street and 500 Congress Street. The MassDEP was notified of the 120-day reporting conditions on May 20, 2014 (40 Vernon Street; RTN 3-32188) and September 18, 2014 (500 Congress Street; RTN 3-32443). During soil sampling activities in July 2014, an Imminent Hazard (IH) condition was identified on the 500 Congress Street property. The Trustees of the Medical Office Condominiums reported the IH condition to MassDEP on September 24, 2014 and MassDEP issued RTN 3-32452. The Trustees hired GZA to respond to the IH condition, which consisted on installing a temporary fence and plastic cover around the impacted area.
- PCBs, metals, and petroleum (EPH/VPH) and chlorinated VOCs were detected in disposal site soils. The majority of the contamination detected is related to the historic operations at the Property. Impacted soils are generally limited to the top 3 feet across the Property with a few exceptions where deeper impacts to the groundwater table were observed. The deepest impacts were identified in AOI #1 (former sump area; approximately 14 feet bgs) and AOI #2 (central yard area; greater than 7 feet bgs).
- Historical fill is present at depths ranging from existing grade to approximately 8 feet bgs at the disposal site. The underlying stratigraphy consists of interbedded sequences of dense silt, and coarse to fine

sand, which generally grades toward more sand with depth. Organic peat was also observed in several of the soil borings throughout the Property at a depth of approximately 8-15 feet bgs.

- Groundwater is typically encountered at a depth of 5 to 12 feet bgs, with the depth varying seasonally and the locations of monitoring wells on top of the fill material that was located below the former building. Groundwater flow is generally towards the east and northeast in the approximate direction of Town Brook.
- Low concentrations of chlorinated solvents, cadmium, and zinc were detected in groundwater but are not expected to migrate off-Property at significant concentrations above applicable Method 1 RC standards.
- NAPL was not observed in any monitoring wells at the Property.
- The RC concluded that Method 1 RC standards and UCLs were exceeded in soil and/or groundwater. Therefore, this condition precludes the achievement of No Significant Risk to Human Health, Public Welfare, and the Environment at the disposal site.
- A condition of No Significant Risk to safety has been achieved at the disposal site.
- Additional Comprehensive Response Actions are required at this disposal site to achieve a Permanent Solution. A Phase III Remedial Action Plan was submitted concurrently with this Phase II CSA Report.

PHASE III RAP CONCLUSIONS

The retained Remedial Action Alternatives (RAAs) present vastly different approaches to address residual impacts at the disposal site. Some alternatives offer a more “active” or “direct” approach by removing impacted soil while others rely upon institutional controls and chemically altering impacted soil. The potential also exists for residual impacts to remain in the subsurface following implementation due to unforeseen circumstances during excavation, notably that subsurface impacts may extend too far vertically and approximately 8 feet into the water table or off-property below structures. The results from the recent pilot test support the effectiveness of soil fixation/stabilization for RCRA materials (lead) and chlordane-impacted soil and can be used to reduce costs for soil excavation and off-site disposal. Limited options are available for the types of impacts and extents of contamination at this disposal site. Therefore, institutional controls may be necessary to prevent exposures to certain receptors if excavation and soil stabilization activities cannot eliminate risks to residential receptors. Groundwater impacts are limited and are expected to decrease upon removal of impacted vadose zone soil.

Based upon significant experience with the RAAs evaluated in this Phase III RAP, Woodard & Curran anticipates that all three will be the most effective approach for the release of OHM identified at the disposal site. The RAAs were selected based implementability, effectiveness and reliability in reaching a Permanent Solution, as well as the risks, benefits, and timing involved with implementing the RAAs. A Permanent Solution will be achieved relatively quickly upon completion of the approach. A Permanent Solution will be achieved when contaminant concentrations are below risk-based cleanup levels with the implementation of institutional controls (if needed) and a condition of No Significant Risk of harm to human health, public welfare, and the environment is achieved. These RAAs meet the remedial objectives for the disposal site and incorporates a combined source area reduction and beneficial influence on impacted groundwater. This selection was predicated on recent pilot test activities, which demonstrated the applicability and effectiveness of soil fixation/stabilization.

The USEPA intends on conducting a Removal Program to mitigate impacts identified in vadose zone soil, which should eliminate a majority of elevated concentrations of COPCs at the disposal site. USEPA’s approach is similar to the RAAs described in this Phase III RAP with the exception of the stabilization/fixation materials. The USEPA is planning on using crystalline permanganate to stabilize metals and chlordane. If additional stabilization is warranted after the Removal Program and funding is available, the City may undertake additional stabilization/fixation activities using cement as summarized in Section 3.4 to achieve a Permanent Solution. Groundwater monitoring will also be performed upon installation of replacement wells after the Removal Program is completed.





Groundwater Monitoring Wells

Existing Groundwater Monitoring Well

Abandoned Groundwater Monitoring Well

Site Features

Surveyed Fence Line

Disposal Site Boundary

Areas of Interest (AOI)

Tax/Property Boundaries

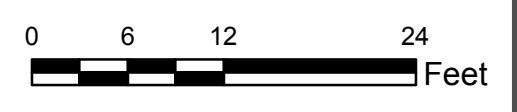
Note: Groundwater monitoring well locations and elevation were collected by DaSilva.

175 & 189 INTERVALE STREET
Quincy, Massachusetts

**Site Plan
With Groundwater Monitoring Well
Locations**

FIGURE 2-2

SCALE: 1" = 12'	Monitoring Well Locations.MXD
DATE: OCTOBER 2014	JOB NO.: 226332.01
DRAWN BY: PQ	SOURCE: ESRI





October 31, 2014

Christopher Foster, Esq.
Robinson & Cole, LLP
One Boston Place, 25th Floor
Boston, MA 02108

Re: Phase II Comprehensive Site Assessment Report & Phase III Remedial Action Plan
175 & 189 Intervale Street
Quincy, Massachusetts
MassDEP Release Tracking Number 3-2524

Dear Dr. Foster:

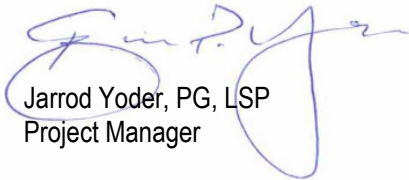
This letter is being sent to you to fulfill the public notification requirements established by the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). The public notification provisions of the MCP require that owners of properties located within the disposal site boundary from a release of oil or hazardous material be notified of the submittal of a Phase II Comprehensive Site Assessment (CSA) Report & Phase III Remedial Action Plan (RAP). This letter specifically pertains to the property located 40 Vernon Street in Quincy, Massachusetts which is located within the disposal site boundary associated with a release of oil and hazardous material at the 175 & 189 Intervale Street property in Quincy, Massachusetts. A summary of findings and conclusions for these reports and the Site Plan are attached to this letter for your reference.

A complete copy of the Phase II CSA Report & Phase III RAP will be submitted to the Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office (NERO) located at 205B Lowell Street in Wilmington, Massachusetts after November 5, 2014 and may be available for review on the MassDEP file viewer website (http://public.dep.state.ma.us/wsc_viewer/main.aspx). If it is not available on the MassDEP website, please contact the MassDEP NERO to schedule a file review.

If you have any questions regarding this notification, please feel free to contact me at (978) 557-8150.

Sincerely,

WOODARD & CURRAN INC.



Jarrod Yoder, PG, LSP
Project Manager

226332.01

Enclosures: BWSC122
Phase II and Phase III Summary of Findings and Statement of Conclusions
Site Plan

cc: MassDEP – Northeast Regional Office



ENCLOSURES: BWSC122

**PHASE II & PHASE III SUMMARY OF FINDINGS
AND STATEMENT OF CONCLUSIONS**

SITE PLAN



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC122

This notice is related to:
Release Tracking Number

INFORMATIONAL NOTICE TO PROPERTY OWNERS

As Required by 310 CMR 40.1406 of the Massachusetts Contingency Plan (MCP)

-

A. DISPOSAL SITE ADDRESS: (associated with Release Tracking Number provided above)

1. Street Address: _____
2. City/Town: _____ 3. ZIP Code: _____
4. Assessor's Parcel ID: _____

B. THIS NOTICE IS BEING PROVIDED TO THE FOLLOWING PROPERTY OWNER:

1. Name of Property Owner: _____
2. Address of Property For Which This Notice is Being Provided: (property owned by person named in B1)
- a. Street Address: _____
- b. City/Town: _____ c. ZIP Code: _____
3. Assessor's Parcel ID: _____

C. THIS NOTICE IS BEING GIVEN : (check one)

- ☐ 1. Upon Completion of a Phase II Comprehensive Site Assessment.
- ☐ 2. Upon Submittal of a Permanent or Temporary Solution Statement (i.e., Site Closure Report).
- ☐ 3. Upon Completion of Additional Investigation showing that Oil or Hazardous Material is not Present at the Property.

D. DESCRIPTION OF OIL AND/OR HAZARDOUS MATERIAL PRESENT OR LIKELY TO BE PRESENT AT THE PROPERTY :
(check all that apply)

AFFECTED ENVIRONMENTAL MEDIA

PRINCIPAL CHEMICAL(S) PRESENT

- ☐ 1. Soil _____
- ☐ 2. Groundwater _____
- ☐ 3. Surface Water _____
- ☐ 4. Sediment _____
- ☐ 5. Indoor Air _____
- ☐ 6. Soil Gas _____
- ☐ 7. Other: _____
(specify)

E. ATTACHMENTS PROVIDED WITH THIS NOTICE, AS REQUIRED BY 310 CMR 40.1406:

- ☐ 1. A Copy of the Map Showing or a Description Describing the Area where the Oil and/or Hazardous Material is or is likely to be Present.
- ☐ 2. A Copy of the Phase II Comprehensive Site Assessment or Permanent or Temporary Solution Statement Conclusions.
- ☐ 3. Specify the category of Solution that applies to the Disposal Site.
- ☐ 1. Permanent Solution with No Conditions.
- ☐ 2. Permanent Solution with Conditions.
- ☐ i. An Activity and Use Limitation has been implemented.
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- ☐ 3. Temporary Solution.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC122

This notice is related to:
Release Tracking Number

INFORMATIONAL NOTICE TO PROPERTY OWNERS

As Required by 310 CMR 40.1406 of the Massachusetts Contingency Plan (MCP)

 -

F. CONTACT INFORMATION RELATING TO THE PARTY PROVIDING THIS NOTICE:

1. Name of Organization: _____
2. Contact First Name: _____ 3. Last Name: _____
4. Street: _____ 5. Title: _____
6. City/Town: _____ 7. State: _____ 8. ZIP Code: _____
9. Telephone: _____ 10. Email: _____

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1406. The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party(ies) who is/are addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form.

PURPOSE OF THIS NOTICE

Parties who are taking actions to respond to releases of oil or hazardous material to the environment are required by state regulations (referred to above) to notify the owners of property where the oil or hazardous material is or is likely to be present. These same parties are also required to notify property owners upon completion of actions to address the oil or hazardous material, or if additional investigations show that the oil or hazardous material is not present at a property. **Section C** on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time.

INFORMATION RELATED TO YOUR PROPERTY

Section D on the reverse side of this form indicates the type(s) of oil or hazardous material that is or is likely to be present at your property, and the environmental medium (e.g., soil or groundwater) where it is or is likely to be present. **Please note** that when an investigation indicates that the oil or hazardous material is or is likely to be present at your property, this does not mean that the oil or hazardous material is posing a health risk to you. Parties who are taking actions to address oil and hazardous material releases are required by state regulations to adequately investigate these releases and take necessary actions to ensure that affected properties meet standards that are protective of human health and the environment.

ATTACHED MAP OR DESCRIPTION AND REPORT CONCLUSIONS

The party providing this notice to you is required to attach a map or description that indicates the boundaries of the area where the oil or hazardous material is or is likely to be present, and the conclusions of the site investigation or closure report (**Section E**). These attachments should give you additional information about the nature and location of the oil or hazardous material with respect to your property.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>.

For more information regarding this notice, you may contact the party listed in **Section F** of this form. Information about the disposal site identified in **Section A** is also available in files at the Massachusetts Department of Environmental Protection.

See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

PHASE II CSA CONCLUSIONS

This section summarizes the findings of the Phase II CSA for 175 & 189 Intervale Street in Quincy, Massachusetts. Historical research and field investigation activities conducted at the disposal site have led to the following conclusions:

- The disposal site, identified as RTN 3-2524 comprises approximately 36,000 square feet (0.83 acres) across 175 & 189 Intervale Street, the paper street, a portion of 500 Congress Street and a portion of 40 Vernon Street in Quincy, Massachusetts.
- Earliest obtainable records indicate that properties at 175 & 189 Intervale Street have been utilized as a junk yard and metal scrapping facility since the early 1940's.
- PDM Metals, Inc. occupied the Property beginning in June 1971 when the land was purchased by Henry P. Gregoire, Trustee of the Gregoire Family Trust. PDM Metals continued operations at the property until the mid-1990's when the Property was abandoned by the Gregoire Family Trust. The property was seized by the City via tax foreclosure in 2009 and has maintained the exempt status under M.G.L. 21E, Section 2.
- The Property was used by PDM Metals for auto salvage, metal scrapping, transformer cutting, manhole recoating and general materials storage. Improper procedures and mishandling of materials during these former operations are the sources of the conditions of OHM contamination at the Property.
- Potential conditions of OHM contamination were noted by MassDEP (formerly MassDEQE) in 1986, following a fire involving a 55-gallon drum of apparent waste solvent. Due to the length of operations occurring prior to and following the initial discovery of the contamination, it cannot be determined if releases may have occurred at different times, with different materials, and at different magnitudes.
- Hazardous materials left over from operations at the Property were collected, removed, and transported off-Property for disposal at an approved facility by the City in December 2012 and January 2013. All known sources of OHM have been removed or eliminated and historical operations and practices are no longer active at the Property.
- The former building was demolished in August/September 2013. During demolition activities, PCB-impacts building foundation and soil were encountered and a RAM Plan was prepared to remove the impacted foundation and soil in the top 3 feet to reduce site risks. The RAM was modified to conduct a bench-scale and pilot scale test to evaluate potential options to stabilize leachable lead and chlordane detected in disposal samples.
- During Phase II CSA activities, soil samples were collected from off-Property locations to better define the nature and extent of impacts from historical PDM, Inc. activities. Two off-property location (40 Vernon Street and 500 Congress Street) were approached by the City to collect samples under the Massachusetts Brownfields program. 120-day reporting conditions were identified at 40 Vernon Street and 500 Congress Street. The MassDEP was notified of the 120-day reporting conditions on May 20, 2014 (40 Vernon Street; RTN 3-32188) and September 18, 2014 (500 Congress Street; RTN 3-32443). During soil sampling activities in July 2014, an Imminent Hazard (IH) condition was identified on the 500 Congress Street property. The Trustees of the Medical Office Condominiums reported the IH condition to MassDEP on September 24, 2014 and MassDEP issued RTN 3-32452. The Trustees hired GZA to respond to the IH condition, which consisted on installing a temporary fence and plastic cover around the impacted area.
- PCBs, metals, and petroleum (EPH/VPH) and chlorinated VOCs were detected in disposal site soils. The majority of the contamination detected is related to the historic operations at the Property. Impacted soils are generally limited to the top 3 feet across the Property with a few exceptions where deeper impacts to the groundwater table were observed. The deepest impacts were identified in AOI #1 (former sump area; approximately 14 feet bgs) and AOI #2 (central yard area; greater than 7 feet bgs).
- Historical fill is present at depths ranging from existing grade to approximately 8 feet bgs at the disposal site. The underlying stratigraphy consists of interbedded sequences of dense silt, and coarse to fine

sand, which generally grades toward more sand with depth. Organic peat was also observed in several of the soil borings throughout the Property at a depth of approximately 8-15 feet bgs.

- Groundwater is typically encountered at a depth of 5 to 12 feet bgs, with the depth varying seasonally and the locations of monitoring wells on top of the fill material that was located below the former building. Groundwater flow is generally towards the east and northeast in the approximate direction of Town Brook.
- Low concentrations of chlorinated solvents, cadmium, and zinc were detected in groundwater but are not expected to migrate off-Property at significant concentrations above applicable Method 1 RC standards.
- NAPL was not observed in any monitoring wells at the Property.
- The RC concluded that Method 1 RC standards and UCLs were exceeded in soil and/or groundwater. Therefore, this condition precludes the achievement of No Significant Risk to Human Health, Public Welfare, and the Environment at the disposal site.
- A condition of No Significant Risk to safety has been achieved at the disposal site.
- Additional Comprehensive Response Actions are required at this disposal site to achieve a Permanent Solution. A Phase III Remedial Action Plan was submitted concurrently with this Phase II CSA Report.

PHASE III RAP CONCLUSIONS

The retained Remedial Action Alternatives (RAAs) present vastly different approaches to address residual impacts at the disposal site. Some alternatives offer a more “active” or “direct” approach by removing impacted soil while others rely upon institutional controls and chemically altering impacted soil. The potential also exists for residual impacts to remain in the subsurface following implementation due to unforeseen circumstances during excavation, notably that subsurface impacts may extend too far vertically and approximately 8 feet into the water table or off-property below structures. The results from the recent pilot test support the effectiveness of soil fixation/stabilization for RCRA materials (lead) and chlordane-impacted soil and can be used to reduce costs for soil excavation and off-site disposal. Limited options are available for the types of impacts and extents of contamination at this disposal site. Therefore, institutional controls may be necessary to prevent exposures to certain receptors if excavation and soil stabilization activities cannot eliminate risks to residential receptors. Groundwater impacts are limited and are expected to decrease upon removal of impacted vadose zone soil.

Based upon significant experience with the RAAs evaluated in this Phase III RAP, Woodard & Curran anticipates that all three will be the most effective approach for the release of OHM identified at the disposal site. The RAAs were selected based implementability, effectiveness and reliability in reaching a Permanent Solution, as well as the risks, benefits, and timing involved with implementing the RAAs. A Permanent Solution will be achieved relatively quickly upon completion of the approach. A Permanent Solution will be achieved when contaminant concentrations are below risk-based cleanup levels with the implementation of institutional controls (if needed) and a condition of No Significant Risk of harm to human health, public welfare, and the environment is achieved. These RAAs meet the remedial objectives for the disposal site and incorporates a combined source area reduction and beneficial influence on impacted groundwater. This selection was predicated on recent pilot test activities, which demonstrated the applicability and effectiveness of soil fixation/stabilization.

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Groundwater Monitoring Wells

Existing Groundwater Monitoring Well

Abandoned Groundwater Monitoring Well

Site Features

Surveyed Fence Line

Disposal Site Boundary

Areas of Interest (AOI)

Tax/Property Boundaries

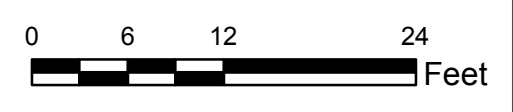
Note: Groundwater monitoring well locations and elevation were collected by DaSilva.

175 & 189 INTERVALE STREET
Quincy, Massachusetts

**Site Plan
With Groundwater Monitoring Well
Locations**

FIGURE 2-2

SCALE: 1" = 12'	Monitoring Well Locations.MXD
DATE: OCTOBER 2014	JOB NO.: 226332.01
DRAWN BY: PQ	SOURCE: ESRI





October 31, 2014

Mr. Andrew Scheele
City of Quincy Board of Health
440 East Squantum Street
Quincy, MA 02171

Re: Phase II Comprehensive Site Assessment Report & Phase III Remedial Action Plan
175 & 189 Intervale Street
Quincy, Massachusetts
MassDEP Release Tracking Number 3-2524

Dear Mr. Scheele:

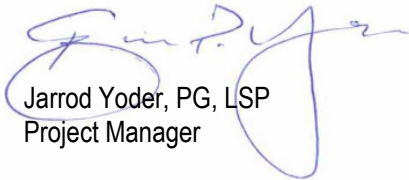
This letter is being sent to you to fulfill the public notification requirements established by the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). The public notification provisions of the MCP require that owners of properties located within the disposal site boundary from a release of oil or hazardous material be notified of the submittal of a Phase II Comprehensive Site Assessment (CSA) Report & Phase III Remedial Action Plan (RAP). This letter specifically pertains to the property located 40 Vernon Street in Quincy, Massachusetts which is located within the disposal site boundary associated with a release of oil and hazardous material at the 175 & 189 Intervale Street property in Quincy, Massachusetts. A summary of findings and conclusions for these reports and the Site Plan are attached to this letter for your reference.

A complete copy of the Phase II CSA Report & Phase III RAP will be submitted to the Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office (NERO) located at 205B Lowell Street in Wilmington, Massachusetts after November 5, 2014 and may be available for review on the MassDEP file viewer website (http://public.dep.state.ma.us/wsc_viewer/main.aspx). If it is not available on the MassDEP website, please contact the MassDEP NERO to schedule a file review.

If you have any questions regarding this notification, please feel free to contact me at (978) 557-8150.

Sincerely,

WOODARD & CURRAN INC.



Jarrod Yoder, PG, LSP
Project Manager

226332.01

Enclosures: BWSC122
Phase II and Phase III Summary of Findings and Statement of Conclusions
Site Plan

cc: MassDEP – Northeast Regional Office



ENCLOSURES: BWSC122

**PHASE II & PHASE III SUMMARY OF FINDINGS
AND STATEMENT OF CONCLUSIONS**

SITE PLAN



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC122

This notice is related to:
Release Tracking Number

INFORMATIONAL NOTICE TO PROPERTY OWNERS

As Required by 310 CMR 40.1406 of the Massachusetts Contingency Plan (MCP)

-

A. DISPOSAL SITE ADDRESS: (associated with Release Tracking Number provided above)

1. Street Address: _____
2. City/Town: _____ 3. ZIP Code: _____
4. Assessor's Parcel ID: _____

B. THIS NOTICE IS BEING PROVIDED TO THE FOLLOWING PROPERTY OWNER:

1. Name of Property Owner: _____
2. Address of Property For Which This Notice is Being Provided: (property owned by person named in B1)
- a. Street Address: _____
- b. City/Town: _____ c. ZIP Code: _____
3. Assessor's Parcel ID: _____

C. THIS NOTICE IS BEING GIVEN : (check one)

- ☐ 1. Upon Completion of a Phase II Comprehensive Site Assessment.
- ☐ 2. Upon Submittal of a Permanent or Temporary Solution Statement (i.e., Site Closure Report).
- ☐ 3. Upon Completion of Additional Investigation showing that Oil or Hazardous Material is not Present at the Property.

D. DESCRIPTION OF OIL AND/OR HAZARDOUS MATERIAL PRESENT OR LIKELY TO BE PRESENT AT THE PROPERTY :
(check all that apply)

AFFECTED ENVIRONMENTAL MEDIA

PRINCIPAL CHEMICAL(S) PRESENT

- | | |
|---|-------|
| <input type="checkbox"/> 1. Soil | _____ |
| <input type="checkbox"/> 2. Groundwater | _____ |
| <input type="checkbox"/> 3. Surface Water | _____ |
| <input type="checkbox"/> 4. Sediment | _____ |
| <input type="checkbox"/> 5. Indoor Air | _____ |
| <input type="checkbox"/> 6. Soil Gas | _____ |
| <input type="checkbox"/> 7. Other: _____ | _____ |
- (specify)

E. ATTACHMENTS PROVIDED WITH THIS NOTICE, AS REQUIRED BY 310 CMR 40.1406:

- ☐ 1. A Copy of the Map Showing or a Description Describing the Area where the Oil and/or Hazardous Material is or is likely to be Present.
- ☐ 2. A Copy of the Phase II Comprehensive Site Assessment or Permanent or Temporary Solution Statement Conclusions.
- ☐ 3. Specify the category of Solution that applies to the Disposal Site.
- ☐ 1. Permanent Solution with No Conditions.
- ☐ 2. Permanent Solution with Conditions.
- ☐ i. An Activity and Use Limitation has been implemented.
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- ☐ 3. Temporary Solution.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC122

This notice is related to:
Release Tracking Number

INFORMATIONAL NOTICE TO PROPERTY OWNERS

As Required by 310 CMR 40.1406 of the Massachusetts Contingency Plan (MCP)

 -

F. CONTACT INFORMATION RELATING TO THE PARTY PROVIDING THIS NOTICE:

1. Name of Organization: _____
2. Contact First Name: _____ 3. Last Name: _____
4. Street: _____ 5. Title: _____
6. City/Town: _____ 7. State: _____ 8. ZIP Code: _____
9. Telephone: _____ 10. Email: _____

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1406. The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party(ies) who is/are addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form.

PURPOSE OF THIS NOTICE

Parties who are taking actions to respond to releases of oil or hazardous material to the environment are required by state regulations (referred to above) to notify the owners of property where the oil or hazardous material is or is likely to be present. These same parties are also required to notify property owners upon completion of actions to address the oil or hazardous material, or if additional investigations show that the oil or hazardous material is not present at a property. **Section C** on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time.

INFORMATION RELATED TO YOUR PROPERTY

Section D on the reverse side of this form indicates the type(s) of oil or hazardous material that is or is likely to be present at your property, and the environmental medium (e.g., soil or groundwater) where it is or is likely to be present. **Please note** that when an investigation indicates that the oil or hazardous material is or is likely to be present at your property, this does not mean that the oil or hazardous material is posing a health risk to you. Parties who are taking actions to address oil and hazardous material releases are required by state regulations to adequately investigate these releases and take necessary actions to ensure that affected properties meet standards that are protective of human health and the environment.

ATTACHED MAP OR DESCRIPTION AND REPORT CONCLUSIONS

The party providing this notice to you is required to attach a map or description that indicates the boundaries of the area where the oil or hazardous material is or is likely to be present, and the conclusions of the site investigation or closure report (**Section E**). These attachments should give you additional information about the nature and location of the oil or hazardous material with respect to your property.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>.

For more information regarding this notice, you may contact the party listed in **Section F** of this form. Information about the disposal site identified in **Section A** is also available in files at the Massachusetts Department of Environmental Protection.

See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

PHASE II CSA CONCLUSIONS

This section summarizes the findings of the Phase II CSA for 175 & 189 Intervale Street in Quincy, Massachusetts. Historical research and field investigation activities conducted at the disposal site have led to the following conclusions:

- The disposal site, identified as RTN 3-2524 comprises approximately 36,000 square feet (0.83 acres) across 175 & 189 Intervale Street, the paper street, a portion of 500 Congress Street and a portion of 40 Vernon Street in Quincy, Massachusetts.
- Earliest obtainable records indicate that properties at 175 & 189 Intervale Street have been utilized as a junk yard and metal scrapping facility since the early 1940's.
- PDM Metals, Inc. occupied the Property beginning in June 1971 when the land was purchased by Henry P. Gregoire, Trustee of the Gregoire Family Trust. PDM Metals continued operations at the property until the mid-1990's when the Property was abandoned by the Gregoire Family Trust. The property was seized by the City via tax foreclosure in 2009 and has maintained the exempt status under M.G.L. 21E, Section 2.
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- Potential conditions of OHM contamination were noted by MassDEP (formerly MassDEQE) in 1986, following a fire involving a 55-gallon drum of apparent waste solvent. Due to the length of operations occurring prior to and following the initial discovery of the contamination, it cannot be determined if releases may have occurred at different times, with different materials, and at different magnitudes.
- Hazardous materials left over from operations at the Property were collected, removed, and transported off-Property for disposal at an approved facility by the City in December 2012 and January 2013. All known sources of OHM have been removed or eliminated and historical operations and practices are no longer active at the Property.
- The former building was demolished in August/September 2013. During demolition activities, PCB-impacts building foundation and soil were encountered and a RAM Plan was prepared to remove the impacted foundation and soil in the top 3 feet to reduce site risks. The RAM was modified to conduct a bench-scale and pilot scale test to evaluate potential options to stabilize leachable lead and chlordane detected in disposal samples.
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sand, which generally grades toward more sand with depth. Organic peat was also observed in several of the soil borings throughout the Property at a depth of approximately 8-15 feet bgs.

- Groundwater is typically encountered at a depth of 5 to 12 feet bgs, with the depth varying seasonally and the locations of monitoring wells on top of the fill material that was located below the former building. Groundwater flow is generally towards the east and northeast in the approximate direction of Town Brook.
- Low concentrations of chlorinated solvents, cadmium, and zinc were detected in groundwater but are not expected to migrate off-Property at significant concentrations above applicable Method 1 RC standards.
- NAPL was not observed in any monitoring wells at the Property.
- The RC concluded that Method 1 RC standards and UCLs were exceeded in soil and/or groundwater. Therefore, this condition precludes the achievement of No Significant Risk to Human Health, Public Welfare, and the Environment at the disposal site.
- A condition of No Significant Risk to safety has been achieved at the disposal site.
- Additional Comprehensive Response Actions are required at this disposal site to achieve a Permanent Solution. A Phase III Remedial Action Plan was submitted concurrently with this Phase II CSA Report.

PHASE III RAP CONCLUSIONS

The retained Remedial Action Alternatives (RAAs) present vastly different approaches to address residual impacts at the disposal site. Some alternatives offer a more “active” or “direct” approach by removing impacted soil while others rely upon institutional controls and chemically altering impacted soil. The potential also exists for residual impacts to remain in the subsurface following implementation due to unforeseen circumstances during excavation, notably that subsurface impacts may extend too far vertically and approximately 8 feet into the water table or off-property below structures. The results from the recent pilot test support the effectiveness of soil fixation/stabilization for RCRA materials (lead) and chlordane-impacted soil and can be used to reduce costs for soil excavation and off-site disposal. Limited options are available for the types of impacts and extents of contamination at this disposal site. Therefore, institutional controls may be necessary to prevent exposures to certain receptors if excavation and soil stabilization activities cannot eliminate risks to residential receptors. Groundwater impacts are limited and are expected to decrease upon removal of impacted vadose zone soil.

Based upon significant experience with the RAAs evaluated in this Phase III RAP, Woodard & Curran anticipates that all three will be the most effective approach for the release of OHM identified at the disposal site. The RAAs were selected based implementability, effectiveness and reliability in reaching a Permanent Solution, as well as the risks, benefits, and timing involved with implementing the RAAs. A Permanent Solution will be achieved relatively quickly upon completion of the approach. A Permanent Solution will be achieved when contaminant concentrations are below risk-based cleanup levels with the implementation of institutional controls (if needed) and a condition of No Significant Risk of harm to human health, public welfare, and the environment is achieved. These RAAs meet the remedial objectives for the disposal site and incorporates a combined source area reduction and beneficial influence on impacted groundwater. This selection was predicated on recent pilot test activities, which demonstrated the applicability and effectiveness of soil fixation/stabilization.

The USEPA intends on conducting a Removal Program to mitigate impacts identified in vadose zone soil, which should eliminate a majority of elevated concentrations of COPCs at the disposal site. USEPA’s approach is similar to the RAAs described in this Phase III RAP with the exception of the stabilization/fixation materials. The USEPA is planning on using crystalline permanganate to stabilize metals and chlordane. If additional stabilization is warranted after the Removal Program and funding is available, the City may undertake additional stabilization/fixation activities using cement as summarized in Section 3.4 to achieve a Permanent Solution. Groundwater monitoring will also be performed upon installation of replacement wells after the Removal Program is completed.





Groundwater Monitoring Wells

Existing Groundwater Monitoring Well

Abandoned Groundwater Monitoring Well

Site Features

Surveyed Fence Line

Disposal Site Boundary

Areas of Interest (AOI)

Tax/Property Boundaries

Note: Groundwater monitoring well locations and elevation were collected by DaSilva.

175 & 189 INTERVALE STREET
Quincy, Massachusetts

Site Plan
With Groundwater Monitoring Well Locations

FIGURE 2-2

SCALE: 1" = 12'

DATE: OCTOBER 2014

DRAWN BY: PQ

Monitoring Well Locations.MXD

JOB NO.: 226332.01

SOURCE: ESRI





October 31, 2014

Mayor Thomas P. Koch
City of Quincy – City Hall
1305 Hancock Street
Quincy, MA 02169

Re: Phase II Comprehensive Site Assessment Report & Phase III Remedial Action Plan
175 & 189 Intervale Street
Quincy, Massachusetts
MassDEP Release Tracking Number 3-2524

Dear Mayor Koch:

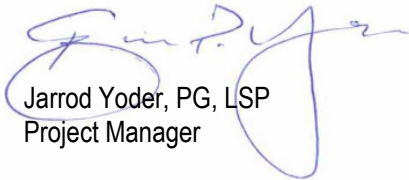
This letter is being sent to you to fulfill the public notification requirements established by the Massachusetts Contingency Plan (MCP; 310 CMR 40.0000). The public notification provisions of the MCP require that owners of properties located within the disposal site boundary from a release of oil or hazardous material be notified of the submittal of a Phase II Comprehensive Site Assessment (CSA) Report & Phase III Remedial Action Plan (RAP). This letter specifically pertains to the property located 40 Vernon Street in Quincy, Massachusetts which is located within the disposal site boundary associated with a release of oil and hazardous material at the 175 & 189 Intervale Street property in Quincy, Massachusetts. A summary of findings and conclusions for these reports and the Site Plan are attached to this letter for your reference.

A complete copy of the Phase II CSA Report & Phase III RAP will be submitted to the Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office (NERO) located at 205B Lowell Street in Wilmington, Massachusetts after November 5, 2014 and may be available for review on the MassDEP file viewer website (http://public.dep.state.ma.us/wsc_viewer/main.aspx). If it is not available on the MassDEP website, please contact the MassDEP NERO to schedule a file review.

If you have any questions regarding this notification, please feel free to contact me at (978) 557-8150.

Sincerely,

WOODARD & CURRAN INC.



Jarrod Yoder, PG, LSP
Project Manager

226332.01

Enclosures: BWSC122
Phase II and Phase III Summary of Findings and Statement of Conclusions
Site Plan

cc: MassDEP – Northeast Regional Office



ENCLOSURES: BWSC122

**PHASE II & PHASE III SUMMARY OF FINDINGS
AND STATEMENT OF CONCLUSIONS**

SITE PLAN



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC122

This notice is related to:
Release Tracking Number

INFORMATIONAL NOTICE TO PROPERTY OWNERS

As Required by 310 CMR 40.1406 of the Massachusetts Contingency Plan (MCP)

-

A. DISPOSAL SITE ADDRESS: (associated with Release Tracking Number provided above)

1. Street Address: _____
2. City/Town: _____ 3. ZIP Code: _____
4. Assessor's Parcel ID: _____

B. THIS NOTICE IS BEING PROVIDED TO THE FOLLOWING PROPERTY OWNER:

1. Name of Property Owner: _____
2. Address of Property For Which This Notice is Being Provided: (property owned by person named in B1)
- a. Street Address: _____
- b. City/Town: _____ c. ZIP Code: _____
3. Assessor's Parcel ID: _____

C. THIS NOTICE IS BEING GIVEN : (check one)

- ☐ 1. Upon Completion of a Phase II Comprehensive Site Assessment.
- ☐ 2. Upon Submittal of a Permanent or Temporary Solution Statement (i.e., Site Closure Report).
- ☐ 3. Upon Completion of Additional Investigation showing that Oil or Hazardous Material is not Present at the Property.

D. DESCRIPTION OF OIL AND/OR HAZARDOUS MATERIAL PRESENT OR LIKELY TO BE PRESENT AT THE PROPERTY :
(check all that apply)

AFFECTED ENVIRONMENTAL MEDIA

PRINCIPAL CHEMICAL(S) PRESENT

- | | |
|---|-------|
| <input type="checkbox"/> 1. Soil | _____ |
| <input type="checkbox"/> 2. Groundwater | _____ |
| <input type="checkbox"/> 3. Surface Water | _____ |
| <input type="checkbox"/> 4. Sediment | _____ |
| <input type="checkbox"/> 5. Indoor Air | _____ |
| <input type="checkbox"/> 6. Soil Gas | _____ |
| <input type="checkbox"/> 7. Other: _____ | _____ |
| (specify) | |

E. ATTACHMENTS PROVIDED WITH THIS NOTICE, AS REQUIRED BY 310 CMR 40.1406:

- ☐ 1. A Copy of the Map Showing or a Description Describing the Area where the Oil and/or Hazardous Material is or is likely to be Present.
- ☐ 2. A Copy of the Phase II Comprehensive Site Assessment or Permanent or Temporary Solution Statement Conclusions.
- ☐ 3. Specify the category of Solution that applies to the Disposal Site.
- ☐ 1. Permanent Solution with No Conditions.
- ☐ 2. Permanent Solution with Conditions.
- ☐ i. An Activity and Use Limitation has been implemented.
- ☐ ii. An Activity and Use Limitation has not been implemented.
- ☐ 3. Temporary Solution.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC122

This notice is related to:
Release Tracking Number

INFORMATIONAL NOTICE TO PROPERTY OWNERS

As Required by 310 CMR 40.1406 of the Massachusetts Contingency Plan (MCP)

 -

F. CONTACT INFORMATION RELATING TO THE PARTY PROVIDING THIS NOTICE:

1. Name of Organization: _____
2. Contact First Name: _____ 3. Last Name: _____
4. Street: _____ 5. Title: _____
6. City/Town: _____ 7. State: _____ 8. ZIP Code: _____
9. Telephone: _____ 10. Email: _____

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1406. The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party(ies) who is/are addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form.

PURPOSE OF THIS NOTICE

Parties who are taking actions to respond to releases of oil or hazardous material to the environment are required by state regulations (referred to above) to notify the owners of property where the oil or hazardous material is or is likely to be present. These same parties are also required to notify property owners upon completion of actions to address the oil or hazardous material, or if additional investigations show that the oil or hazardous material is not present at a property. **Section C** on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time.

INFORMATION RELATED TO YOUR PROPERTY

Section D on the reverse side of this form indicates the type(s) of oil or hazardous material that is or is likely to be present at your property, and the environmental medium (e.g., soil or groundwater) where it is or is likely to be present. **Please note** that when an investigation indicates that the oil or hazardous material is or is likely to be present at your property, this does not mean that the oil or hazardous material is posing a health risk to you. Parties who are taking actions to address oil and hazardous material releases are required by state regulations to adequately investigate these releases and take necessary actions to ensure that affected properties meet standards that are protective of human health and the environment.

ATTACHED MAP OR DESCRIPTION AND REPORT CONCLUSIONS

The party providing this notice to you is required to attach a map or description that indicates the boundaries of the area where the oil or hazardous material is or is likely to be present, and the conclusions of the site investigation or closure report (**Section E**). These attachments should give you additional information about the nature and location of the oil or hazardous material with respect to your property.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at <http://www.mass.gov/eea/agencies/massdep/cleanup>.

For more information regarding this notice, you may contact the party listed in **Section F** of this form. Information about the disposal site identified in **Section A** is also available in files at the Massachusetts Department of Environmental Protection.

See <http://public.dep.state.ma.us/SearchableSites2/Search.aspx> to view site-specific files on-line or <http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html> if you would like to make an appointment to see these files in person. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

PHASE II CSA CONCLUSIONS

This section summarizes the findings of the Phase II CSA for 175 & 189 Intervale Street in Quincy, Massachusetts. Historical research and field investigation activities conducted at the disposal site have led to the following conclusions:

- The disposal site, identified as RTN 3-2524 comprises approximately 36,000 square feet (0.83 acres) across 175 & 189 Intervale Street, the paper street, a portion of 500 Congress Street and a portion of 40 Vernon Street in Quincy, Massachusetts.
- Earliest obtainable records indicate that properties at 175 & 189 Intervale Street have been utilized as a junk yard and metal scrapping facility since the early 1940's.
- PDM Metals, Inc. occupied the Property beginning in June 1971 when the land was purchased by Henry P. Gregoire, Trustee of the Gregoire Family Trust. PDM Metals continued operations at the property until the mid-1990's when the Property was abandoned by the Gregoire Family Trust. The property was seized by the City via tax foreclosure in 2009 and has maintained the exempt status under M.G.L. 21E, Section 2.
- The Property was used by PDM Metals for auto salvage, metal scrapping, transformer cutting, manhole recoating and general materials storage. Improper procedures and mishandling of materials during these former operations are the sources of the conditions of OHM contamination at the Property.
- Potential conditions of OHM contamination were noted by MassDEP (formerly MassDEQE) in 1986, following a fire involving a 55-gallon drum of apparent waste solvent. Due to the length of operations occurring prior to and following the initial discovery of the contamination, it cannot be determined if releases may have occurred at different times, with different materials, and at different magnitudes.
- Hazardous materials left over from operations at the Property were collected, removed, and transported off-Property for disposal at an approved facility by the City in December 2012 and January 2013. All known sources of OHM have been removed or eliminated and historical operations and practices are no longer active at the Property.
- The former building was demolished in August/September 2013. During demolition activities, PCB-impacts building foundation and soil were encountered and a RAM Plan was prepared to remove the impacted foundation and soil in the top 3 feet to reduce site risks. The RAM was modified to conduct a bench-scale and pilot scale test to evaluate potential options to stabilize leachable lead and chlordane detected in disposal samples.
- During Phase II CSA activities, soil samples were collected from off-Property locations to better define the nature and extent of impacts from historical PDM, Inc. activities. Two off-property location (40 Vernon Street and 500 Congress Street) were approached by the City to collect samples under the Massachusetts Brownfields program. 120-day reporting conditions were identified at 40 Vernon Street and 500 Congress Street. The MassDEP was notified of the 120-day reporting conditions on May 20, 2014 (40 Vernon Street; RTN 3-32188) and September 18, 2014 (500 Congress Street; RTN 3-32443). During soil sampling activities in July 2014, an Imminent Hazard (IH) condition was identified on the 500 Congress Street property. The Trustees of the Medical Office Condominiums reported the IH condition to MassDEP on September 24, 2014 and MassDEP issued RTN 3-32452. The Trustees hired GZA to respond to the IH condition, which consisted on installing a temporary fence and plastic cover around the impacted area.
- PCBs, metals, and petroleum (EPH/VPH) and chlorinated VOCs were detected in disposal site soils. The majority of the contamination detected is related to the historic operations at the Property. Impacted soils are generally limited to the top 3 feet across the Property with a few exceptions where deeper impacts to the groundwater table were observed. The deepest impacts were identified in AOI #1 (former sump area; approximately 14 feet bgs) and AOI #2 (central yard area; greater than 7 feet bgs).
- Historical fill is present at depths ranging from existing grade to approximately 8 feet bgs at the disposal site. The underlying stratigraphy consists of interbedded sequences of dense silt, and coarse to fine

sand, which generally grades toward more sand with depth. Organic peat was also observed in several of the soil borings throughout the Property at a depth of approximately 8-15 feet bgs.

- Groundwater is typically encountered at a depth of 5 to 12 feet bgs, with the depth varying seasonally and the locations of monitoring wells on top of the fill material that was located below the former building. Groundwater flow is generally towards the east and northeast in the approximate direction of Town Brook.
- Low concentrations of chlorinated solvents, cadmium, and zinc were detected in groundwater but are not expected to migrate off-Property at significant concentrations above applicable Method 1 RC standards.
- NAPL was not observed in any monitoring wells at the Property.
- The RC concluded that Method 1 RC standards and UCLs were exceeded in soil and/or groundwater. Therefore, this condition precludes the achievement of No Significant Risk to Human Health, Public Welfare, and the Environment at the disposal site.
- A condition of No Significant Risk to safety has been achieved at the disposal site.
- Additional Comprehensive Response Actions are required at this disposal site to achieve a Permanent Solution. A Phase III Remedial Action Plan was submitted concurrently with this Phase II CSA Report.

PHASE III RAP CONCLUSIONS

The retained Remedial Action Alternatives (RAAs) present vastly different approaches to address residual impacts at the disposal site. Some alternatives offer a more “active” or “direct” approach by removing impacted soil while others rely upon institutional controls and chemically altering impacted soil. The potential also exists for residual impacts to remain in the subsurface following implementation due to unforeseen circumstances during excavation, notably that subsurface impacts may extend too far vertically and approximately 8 feet into the water table or off-property below structures. The results from the recent pilot test support the effectiveness of soil fixation/stabilization for RCRA materials (lead) and chlordane-impacted soil and can be used to reduce costs for soil excavation and off-site disposal. Limited options are available for the types of impacts and extents of contamination at this disposal site. Therefore, institutional controls may be necessary to prevent exposures to certain receptors if excavation and soil stabilization activities cannot eliminate risks to residential receptors. Groundwater impacts are limited and are expected to decrease upon removal of impacted vadose zone soil.

Based upon significant experience with the RAAs evaluated in this Phase III RAP, Woodard & Curran anticipates that all three will be the most effective approach for the release of OHM identified at the disposal site. The RAAs were selected based implementability, effectiveness and reliability in reaching a Permanent Solution, as well as the risks, benefits, and timing involved with implementing the RAAs. A Permanent Solution will be achieved relatively quickly upon completion of the approach. A Permanent Solution will be achieved when contaminant concentrations are below risk-based cleanup levels with the implementation of institutional controls (if needed) and a condition of No Significant Risk of harm to human health, public welfare, and the environment is achieved. These RAAs meet the remedial objectives for the disposal site and incorporates a combined source area reduction and beneficial influence on impacted groundwater. This selection was predicated on recent pilot test activities, which demonstrated the applicability and effectiveness of soil fixation/stabilization.

The USEPA intends on conducting a Removal Program to mitigate impacts identified in vadose zone soil, which should eliminate a majority of elevated concentrations of COPCs at the disposal site. USEPA’s approach is similar to the RAAs described in this Phase III RAP with the exception of the stabilization/fixation materials. The USEPA is planning on using crystalline permanganate to stabilize metals and chlordane. If additional stabilization is warranted after the Removal Program and funding is available, the City may undertake additional stabilization/fixation activities using cement as summarized in Section 3.4 to achieve a Permanent Solution. Groundwater monitoring will also be performed upon installation of replacement wells after the Removal Program is completed.



Sampling Locations

- W&C Soil Sampling Location
- USEPA Surficial Sampling Location (0-4")

Site Features

- - - Surveyed Fence Line
- Disposal Site Boundary
- Areas of Interest (AOI)
- Tax/Property Boundaries

Note: Soil sampling locations were located by Woodard and Curran using a Trimble3000 GeoXT GPS unit. Boring locations were collected by DaSilva during a site survey completed on January 27, 2014.

RAM Excavation Area

Sump Source Area

Building Demolished August 2013

175 & 189 INTERVALE STREET
Quincy, Massachusetts

Site Plan
With Soil Sample Locations

FIGURE 2-1

SCALE: 1" = 12'	Sampling Locations.MXD
DATE: OCTOBER 2014	JOB NO.: 226332.01
DRAWN BY: PQ	SOURCE: ESRI

0 6 12 24
Feet





APPENDIX B PHASE 1 SITE ASSESSMENT MAP

MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

Site Information:

175 & 189 INTERVALE STREET QUINCY, MA

NAD83 UTM Meters:

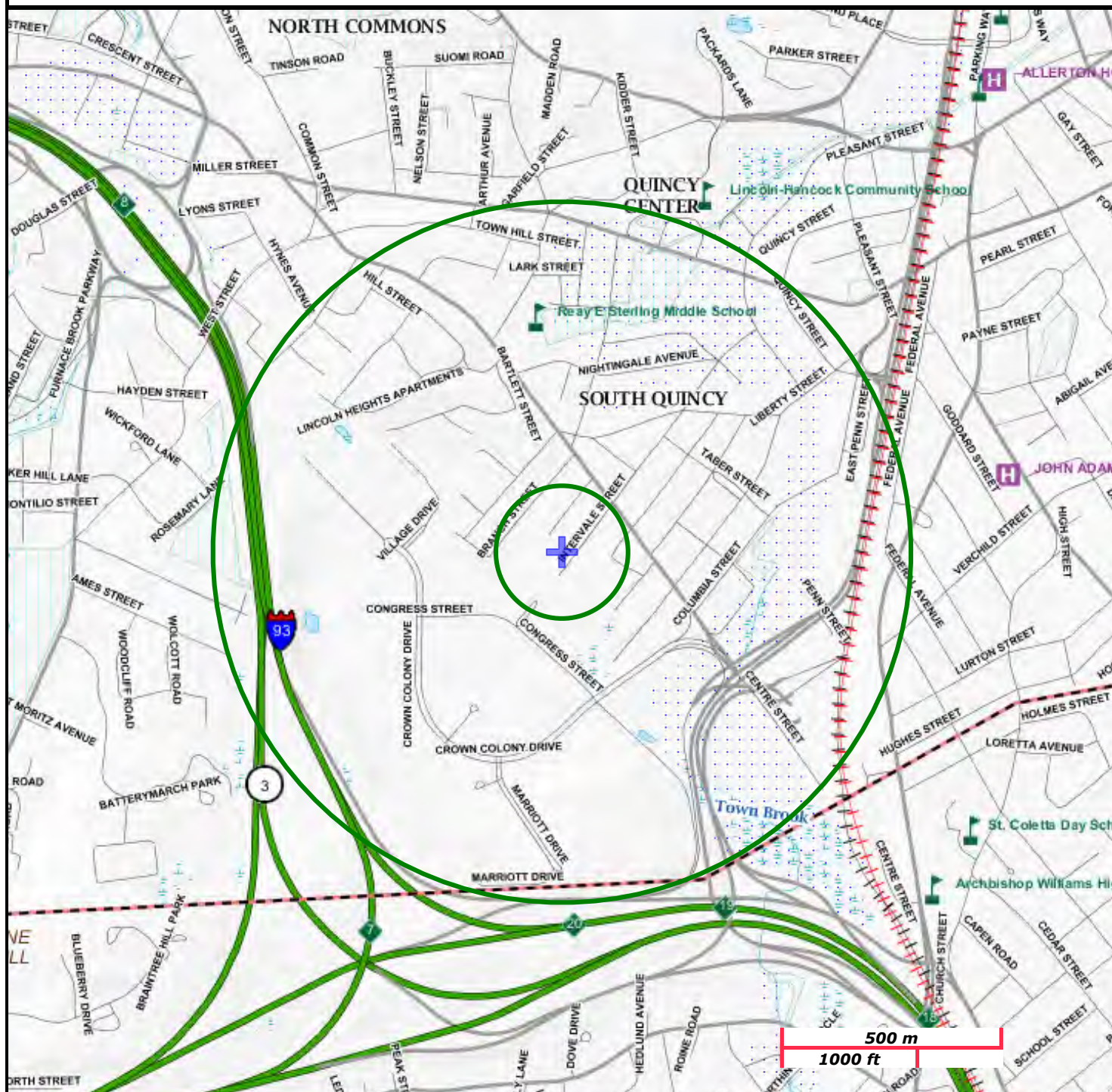
4677880mN, 333745mE (Zone: 19)
October 9, 2014

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at:
<http://www.mass.gov/mgis/>



MassDEP

Commonwealth of Massachusetts
Department of Environmental Protection



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential

Solid Waste Landfill; PWS: Com. GW, SW, Emerg., Non-Com.

APPENDIX C ANALYTICAL LABORATORY REPORTS AND DATA VALIDATION SUMMARIES



United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431

Laboratory Report

July 27, 2012

Brent England - Mail Code OSRR02-2
US EPA New England R1

Project Number: 12070007

Project: Intervale Street Site - Quincy, MA

Analysis: PCBs Medium Level in Soils and Sediments

Analyst: Paul Carroll

Handwritten signature
7.17.12

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, PESTSOIL3.SOP.

The SOP is based on EPA SW-846 Method 8082

The analysis was performed using high resolution capillary column chromatography on an Agilent 6890 Series gas chromatograph equipped with dual electron capture detectors. The 30 meter dual capillary column system consists of a J&W DB-5 and J&W DB-1701, both with 0.25mm ID and 0.25 micron film thickness.

The results are reported on a dry weight basis.

Date Samples Received by the Laboratory : 07/06/2012

Data were reviewed in accordance with the internal verification procedures described in the EPA New England OEME Chemistry QA Plan.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Report may contain multiple sections and each section will be numbered independently.

If you have any questions please call me at 617-918-8340 .

Sincerely,

Handwritten signature of Daniel N. Boudreau 7/31/12
Daniel N. Boudreau
Chemistry Team Leader

Qualifiers: **RL** Reporting limit
ND Not Detected above Reporting limit
NA Not Applicable due to high sample dilutions or sample interferences
J Estimated value
E Estimated value exceeds the calibration range
L Estimated value is below the calibration range
B Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
P The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.
C The identification has been confirmed by GC/MS.
R No recovery was calculated since the analyte concentration is greater than four times the spike level.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA
PCBs Medium Level in Soils and Sediments

Client Sample ID: R01-120705BE-0001
Date of Collection: 7/5/2012
Date of Extraction: 7/9/12
Date of Analysis: 7/17/12
Dry Weight Extracted: 6.07 grams
Wet Weight Extracted: 6.60 grams

Lab Sample ID: AB30998
Matrix: Soil
Final Volume: 5 mL
Percent Solids: 92%
Extract Dilution: 5

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.41	
11104-28-2	Aroclor-1221	ND	0.41	
11141-16-5	Aroclor-1232	ND	0.41	
53469-21-9	Aroclor-1242	ND	0.41	
12672-29-6	Aroclor-1248	ND	0.41	
11097-69-1	Aroclor-1254	ND	0.41	
11096-82-5	Aroclor-1260	1.4	0.41	
11100-14-4	Aroclor-1262	ND	0.41	
37324-23-5	Aroclor-1268	ND	0.41	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	80	36 - 131
Decachlorobiphenyl	115	30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

PCBs Medium Level in Soils and Sediments

Client Sample ID: R01-120705BE-0002

Date of Collection: 7/5/2012

Date of Extraction: 7/9/12

Date of Analysis: 7/17/12

Dry Weight Extracted: 5.43 grams

Wet Weight Extracted: 6.19 grams

Lab Sample ID: AB30999

Matrix: Soil

Final Volume: 5 mL

Percent Solids: 88%

Extract Dilution: 5, 1

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.46	
11104-28-2	Aroclor-1221	ND	0.46	
11141-16-5	Aroclor-1232	ND	0.46	
53469-21-9	Aroclor-1242	ND	0.46	
12672-29-6	Aroclor-1248	ND	0.46	
11097-69-1	Aroclor-1254	0.75	0.46	
11100-14-4	Aroclor-1262	ND	0.46	
37324-23-5	Aroclor-1268	ND	0.46	
11096-82-5	Aroclor-1260	0.79	0.09	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	82	36 - 131
Decachlorobiphenyl	106	30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

PCBs Medium Level in Soils and Sediments

Client Sample ID: R01-120705BE-0003

Lab Sample ID: AB31000

Date of Collection: 7/5/2012

Matrix: Soil

Date of Extraction: 7/9/12

Final Volume: 5 mL

Date of Analysis: 7/17/12

Percent Solids: 89%

Dry Weight Extracted: 5.52 grams

Extract Dilution: 1

Wet Weight Extracted: 6.20 grams

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	79	36 - 131
Decachlorobiphenyl	89	30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

PCBs Medium Level in Soils and Sediments

Client Sample ID: R01-120705BE-0004

Date of Collection: 7/5/2012

Date of Extraction: 7/9/12

Date of Analysis: 7/23/12

Dry Weight Extracted: 5.616 grams

Wet Weight Extracted: 6.051 grams

Lab Sample ID: AB31001

Matrix: Soil

Final Volume: 5 mL

Percent Solids: 93%

Extract Dilution: 10, 2

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.89	
11104-28-2	Aroclor-1221	ND	0.89	
11141-16-5	Aroclor-1232	ND	0.89	
53469-21-9	Aroclor-1242	ND	0.89	
12672-29-6	Aroclor-1248	ND	0.89	
11097-69-1	Aroclor-1254	4.5	0.89	
11100-14-4	Aroclor-1262	ND	0.89	
37324-23-5	Aroclor-1268	ND	0.89	
11096-82-5	Aroclor-1260	1.5	0.18	

Surrogate Compounds

2,4,5,6-Tetrachloro-m-xylene

Decachlorobiphenyl

Recoveries (%)

81

109

QC Ranges

36 - 131

30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

PCBs Medium Level in Soils and Sediments

Client Sample ID: R01-120705BE-0005

Date of Collection: 7/5/2012

Date of Extraction: 7/9/12

Date of Analysis: 7/17/12

Dry Weight Extracted: 5.70 grams

Wet Weight Extracted: 6.30 grams

Lab Sample ID: AB31002

Matrix: Soil

Final Volume: 5 mL

Percent Solids: 90%

Extract Dilution: 5

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.44	
11104-28-2	Aroclor-1221	ND	0.44	
11141-16-5	Aroclor-1232	ND	0.44	
53469-21-9	Aroclor-1242	ND	0.44	
12672-29-6	Aroclor-1248	ND	0.44	
11097-69-1	Aroclor-1254	3.7	0.44	
11096-82-5	Aroclor-1260	1.6	0.44	
11100-14-4	Aroclor-1262	ND	0.44	
37324-23-5	Aroclor-1268	ND	0.44	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	88	36 - 131
Decachlorobiphenyl	113	30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

PCBs Medium Level in Soils and Sediments

Client Sample ID: R01-120705BE-0006

Date of Collection: 7/5/2012

Date of Extraction: 7/9/12

Date of Analysis: 7/17/12

Dry Weight Extracted: 6.01 grams

Wet Weight Extracted: 6.54 grams

Lab Sample ID: AB31003

Matrix: Soil

Final Volume: 5 mL

Percent Solids: 92%

Extract Dilution: 10, 5

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.83	
11104-28-2	Aroclor-1221	ND	0.83	
11141-16-5	Aroclor-1232	ND	0.83	
53469-21-9	Aroclor-1242	ND	0.83	
12672-29-6	Aroclor-1248	ND	0.83	
11097-69-1	Aroclor-1254	6.0	0.83	
11100-14-4	Aroclor-1262	ND	0.83	
37324-23-5	Aroclor-1268	ND	0.83	
11096-82-5	Aroclor-1260	1.5	0.42	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	82	36 - 131
Decachlorobiphenyl	104	30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

PCBs Medium Level in Soils and Sediments

Client Sample ID: R01-120705BE-0007

Lab Sample ID: AB31004

Date of Collection: 7/5/2012

Matrix: Soil

Date of Extraction: 7/9/12

Final Volume: 5 mL

Date of Analysis: 7/17/12

Percent Solids: 92%

Dry Weight Extracted: 5.71 grams

Extract Dilution: 1

Wet Weight Extracted: 6.24 grams

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	68	36 - 131
Decachlorobiphenyl	90	30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

PCBs Medium Level in Soils and Sediments

Client Sample ID: R01-120705BE-0008
Date of Collection: 7/5/2012
Date of Extraction: 7/9/12
Date of Analysis: 7/17/12
Dry Weight Extracted: 5.29 grams
Wet Weight Extracted: 6.08 grams

Lab Sample ID: AB31005
Matrix: Soil
Final Volume: 5 mL
Percent Solids: 87%
Extract Dilution: 5,1

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.47	
11104-28-2	Aroclor-1221	ND	0.47	
11141-16-5	Aroclor-1232	ND	0.47	
53469-21-9	Aroclor-1242	ND	0.47	
12672-29-6	Aroclor-1248	ND	0.47	
11097-69-1	Aroclor-1254	0.60	0.47	P
11100-14-4	Aroclor-1262	ND	0.47	
37324-23-5	Aroclor-1268	ND	0.47	
11096-82-5	Aroclor-1260	0.45	0.09	

Surrogate Compounds

2,4,5,6-Tetrachloro-m-xylene
Decachlorobiphenyl

Recoveries (%)

65
107

QC Ranges

36 - 131
30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

PCBs Medium Level in Soils and Sediments

Client Sample ID: R01-120705BE-0009

Lab Sample ID: AB31006

Date of Collection: 7/5/2012

Matrix: Soil

Date of Extraction: 7/9/12

Final Volume: 5 mL

Date of Analysis: 7/17/12

Percent Solids: 92%

Dry Weight Extracted: 5.67 grams

Extract Dilution: 1

Wet Weight Extracted: 6.13 grams

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.09	
11104-28-2	Aroclor-1221	ND	0.09	
11141-16-5	Aroclor-1232	ND	0.09	
53469-21-9	Aroclor-1242	ND	0.09	
12672-29-6	Aroclor-1248	ND	0.09	
11097-69-1	Aroclor-1254	0.62	0.09	
11096-82-5	Aroclor-1260	0.42	0.09	
11100-14-4	Aroclor-1262	ND	0.09	
37324-23-5	Aroclor-1268	ND	0.09	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	71	36 - 131
Decachlorobiphenyl	84	30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

PCBs Medium Level in Soils and Sediments

Client Sample ID: R01-120705BE-0010

Date of Collection: 7/5/2012

Date of Extraction: 7/9/12

Date of Analysis: 7/17/12

Dry Weight Extracted: 5.22 grams

Wet Weight Extracted: 6.44 grams

Lab Sample ID: AB31007

Matrix: Soil

Final Volume: 5 mL

Percent Solids: 81%

Extract Dilution: 20, 10

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	1.90	
11104-28-2	Aroclor-1221	ND	1.90	
11141-16-5	Aroclor-1232	ND	1.90	
53469-21-9	Aroclor-1242	ND	1.90	
12672-29-6	Aroclor-1248	ND	1.90	
11097-69-1	Aroclor-1254	5.4	1.90	
11100-14-4	Aroclor-1262	ND	1.90	
37324-23-5	Aroclor-1268	ND	1.90	
11096-82-5	Aroclor-1260	4.9	1.00	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	73	36 - 131
Decachlorobiphenyl	115	30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

PCBs Medium Level in Soils and Sediments

Client Sample ID: R01-120705BE-0012

Lab Sample ID: AB31008

Date of Collection: 7/5/2012

Matrix: Soil

Date of Extraction: 7/9/12

Final Volume: 5 mL

Date of Analysis: 7/17/12

Percent Solids: 90%

Dry Weight Extracted: 6.18 grams

Extract Dilution: 20, 10

Wet Weight Extracted: 6.89 grams

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	1.60	
11104-28-2	Aroclor-1221	ND	1.60	
11141-16-5	Aroclor-1232	ND	1.60	
53469-21-9	Aroclor-1242	ND	1.60	
12672-29-6	Aroclor-1248	ND	1.60	
11097-69-1	Aroclor-1254	3.9	1.60	
11100-14-4	Aroclor-1262	ND	1.60	
37324-23-5	Aroclor-1268	ND	1.60	
11096-82-5	Aroclor-1260	1.9	0.80	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	78	36 - 131
Decachlorobiphenyl	109	30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

PCBs Medium Level in Soils and Sediments

Client Sample ID: R01-120705BE-0013

Date of Collection: 7/5/2012

Date of Extraction: 7/9/12

Date of Analysis: 7/17/12

Dry Weight Extracted: 5.00 grams

Wet Weight Extracted: 5.00 grams

Lab Sample ID: AB31009

Matrix: Lab Sand

Final Volume: 5 mL

Percent Solids: 100%

Extract Dilution: 1

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	0.28	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	80	36 - 131
Decachlorobiphenyl	96	30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Laboratory Blank

Client Sample ID: N/A
Date of Collection: N/A
Date of Extraction: 7/9/12
Date of Analysis: 7/17/12
Dry Weight Extracted: 5.02 grams
Wet Weight Extracted: 5.02 grams

Lab Sample ID: N/A
Matrix: Lab Sand
Final Volume: 5 mL
Percent Solids: 100%
Extract Dilution: 1

CAS Number	Compound	Concentration mg/Kg	RL mg/Kg	Qualifier
12674-11-2	Aroclor-1016	ND	0.10	
11104-28-2	Aroclor-1221	ND	0.10	
11141-16-5	Aroclor-1232	ND	0.10	
53469-21-9	Aroclor-1242	ND	0.10	
12672-29-6	Aroclor-1248	ND	0.10	
11097-69-1	Aroclor-1254	ND	0.10	
11096-82-5	Aroclor-1260	ND	0.10	
11100-14-4	Aroclor-1262	ND	0.10	
37324-23-5	Aroclor-1268	ND	0.10	

Surrogate Compounds	Recoveries (%)	QC Ranges
2,4,5,6-Tetrachloro-m-xylene	84	36 - 131
Decachlorobiphenyl	105	30 - 165

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

PCB MATRIX SPIKE (MS) / MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Intervale Street Site - Quincy, MA

Sample ID: AB30999

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
Aroclor-1254	0.55	0.75	1.56	147.27	70 - 130

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION mg/Kg	MSD % REC	RPD %	QC LIMITS RPD
Aroclor-1254	0.55	1.18	78.18	61	50

Samples in Batch: AB30998, AB30999, AB31000, AB31001, AB31002, AB31003, AB31004, AB31005, AB31006,
AB31007, AB31008, AB31009

Comments: Matrix Spike recoveries and relative percent difference (RPD) were high due to the presence of the spiked analyte in the sample.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

LABORATORY DUPLICATE RESULTS

Intervale Street Site - Quincy, MA

Sample ID: AB30999

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aroclor-1016	ND	ND	ND	50
Aroclor-1221	ND	ND	ND	50
Aroclor-1232	ND	ND	ND	50
Aroclor-1242	ND	ND	ND	50
Aroclor-1248	ND	ND	ND	50
Aroclor-1254	0.75	0.87	15	50
Aroclor-1260	0.79	0.69	14	50
Aroclor-1262	ND	ND	ND	50
Aroclor-1268	ND	ND	ND	50

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

LABORATORY FORTIFIED BLANK (LFB) RECOVERY

Intervale Street Site - Quincy, MA

COMPOUND	SPIKE ADDED mg/Kg	LFB CONCENTRATION mg/Kg	LFB RECOVERY %	QC LIMITS (% REC)
Aroclor-1254	0.60	0.63	105	70 - 130

Comments:



United States Environmental Protection Agency
Office of Environmental Measurement & Evaluation
11 Technology Drive
North Chelmsford, MA 01863-2431

Laboratory Report

July 20, 2012

Brent England - Mail Code OSRR02-2
US EPA New England RI

Project Number: 12070007

Project: Intervale Street Site - Quincy, MA

Analysis: Metals in Soil Medium Level by ICP

EPA Chemist: Michael Dowling *le Form 7/30/12*

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Samples were analyzed following the EPA Region I SOP, EIASOP-INGDVICP1.

Samples were prepared following the EPA Region I SOP, EIASOP-INGMETALSPREP7

Preparation and analysis SOP's are based on "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition, Revision 2, Final Update III, Methods 3050B and 6010B," respectively. Samples were analyzed using a Perkin Elmer 4300 Dual View Inductively Coupled Plasma - Optical Emission Spectrometer.

Samples were prepared and analyzed by ESAT contractors working at the USEPA New England Laboratory.

Date Samples Received by the Laboratory: 07/06/2012

Data were reviewed in accordance with the internal verification procedures described in the EPA New England OEME Chemistry QA Plan.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Report may contain multiple sections and each section will be numbered independently.

If you have any questions please call me at 617-918-8340

Sincerely,

Daniel N. Boudreau 7/30/12
Daniel N. Boudreau
Chemistry Team Leader

Laboratory Qualifiers:

RL	Reporting limit
ND	Not Detected above reporting limit
NA	Not Applicable
NC	Not calculated since analyte concentration is ND
J1	Estimated value due to MS recovery outside acceptance criteria
J2	Estimated value due to LFB result outside acceptance criteria
J3	Estimated value due to RPD result outside acceptance criteria
J4	Estimated value due to LCS result outside acceptance criteria
B	Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
R	No recovery was calculated since the analyte concentration is greater than four times the spike level.

All sample results, except the results for sample AB31010, are reported in mg/Kg, dry weight basis. The results for sample AB31010 are reported as received, in mg/Kg.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Metals in Soil Medium Level by ICP

Client Sample ID:	R01-120705BE-0001	Lab Sample ID:	AB30998
Date of Collection:	7/5/2012	Matrix:	Soil
Date of Digestion:	7/10/2012	Final Volume:	50 mL
Date of Analysis:	7/13/2012	Digestate Dilution:	3
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	5700	32	
7440-36-0	Antimony	ND	5.9	
7440-38-2	Arsenic	8.9	5.9	
7440-39-3	Barium	1500	5.9	
7440-41-7	Beryllium	ND	2.4	
7440-43-9	Cadmium	6.3	2.9	
7440-70-2	Calcium	2700	29	
7440-47-3	Chromium	120	5.9	J1
7440-48-4	Cobalt	ND	5.9	
7440-50-8	Copper	3200	5.9	
7439-89-6	Iron	54000	12	
7439-92-1	Lead	3200	5.9	
7439-95-4	Magnesium	2400	29	
7439-96-5	Manganese	790	5.9	
7440-02-0	Nickel	110	5.9	
7782-49-2	Selenium	ND	12	
7440-22-4	Silver	ND	2.9	
7440-28-0	Thallium	ND	5.9	
7440-62-2	Vanadium	28	5.9	
7440-66-6	Zinc	1100	5.9	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Metals in Soil Medium Level by ICP

Client Sample ID: R01-120705BE-0002

Lab Sample ID: AB30999

Date of Collection: 7/5/2012

Matrix: Soil

Date of Digestion: 7/10/2012

Final Volume: 50 mL

Date of Analysis: 7/13/2012

Digestate Dilution: 1

Volume Digested: N/A

pH: N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	12000	11	
7440-36-0	Antimony	3.2	2.0	
7440-38-2	Arsenic	11	2.0	
7440-39-3	Barium	260	2.0	J3
7440-41-7	Beryllium	ND	0.78	
7440-43-9	Cadmium	5.0	0.98	
7440-70-2	Calcium	5900	9.8	
7440-47-3	Chromium	110	2.0	
7440-48-4	Cobalt	9.0	2.0	
7440-50-8	Copper	580	2.0	
7439-89-6	Iron	29000	3.9	
7439-92-1	Lead	1100	2.0	
7439-95-4	Magnesium	3200	9.8	
7439-96-5	Manganese	550	2.0	
7440-02-0	Nickel	93	2.0	
7782-49-2	Selenium	ND	3.9	
7440-22-4	Silver	0.99	0.98	J3
7440-28-0	Thallium	2.5	2.0	
7440-62-2	Vanadium	42	2.0	
7440-66-6	Zinc	1200	2.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Metals in Soil Medium Level by ICP

Client Sample ID: R01-120705BE-0003

Lab Sample ID: AB31000

Date of Collection: 7/5/2012

Matrix: Soil

Date of Digestion: 7/10/2012

Final Volume: 50 mL

Date of Analysis: 7/13/2012

Digestate Dilution: 1

Volume Digested: N/A

pH: N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	7600	11	
7440-36-0	Antimony	ND	1.9	
7440-38-2	Arsenic	4.9	1.9	
7440-39-3	Barium	42	1.9	
7440-41-7	Beryllium	ND	0.77	
7440-43-9	Cadmium	ND	0.96	
7440-70-2	Calcium	2900	9.6	
7440-47-3	Chromium	14	1.9	
7440-48-4	Cobalt	4.1	1.9	
7440-50-8	Copper	35	1.9	
7439-89-6	Iron	12000	3.8	
7439-92-1	Lead	98	1.9	
7439-95-4	Magnesium	2000	9.6	
7439-96-5	Manganese	240	1.9	
7440-02-0	Nickel	13	1.9	
7782-49-2	Selenium	ND	3.8	
7440-22-4	Silver	ND	0.96	
7440-28-0	Thallium	2.6	1.9	
7440-62-2	Vanadium	33	1.9	
7440-66-6	Zinc	88	1.9	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Metals in Soil Medium Level by ICP

Client Sample ID: R01-120705BE-0004

Lab Sample ID: AB31001

Date of Collection: 7/5/2012

Matrix: Soil

Date of Digestion: 7/10/2012

Final Volume: 50 mL

Date of Analysis: 7/13/2012

Digestate Dilution: 5

Volume Digested: N/A

pH: N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	10000	55	
7440-36-0	Antimony	ND	10	
7440-38-2	Arsenic	16	10	
7440-39-3	Barium	410	10	
7440-41-7	Beryllium	ND	4.0	
7440-43-9	Cadmium	7.5	5.0	
7440-70-2	Calcium	5900	50	
7440-47-3	Chromium	340	10	
7440-48-4	Cobalt	14	10	
7440-50-8	Copper	1500	10	
7439-89-6	Iron	100000	20	
7439-92-1	Lead	1300	10	
7439-95-4	Magnesium	3400	50	
7439-96-5	Manganese	1200	10	
7440-02-0	Nickel	270	10	
7782-49-2	Selenium	ND	20	
7440-22-4	Silver	ND	5.0	
7440-28-0	Thallium	ND	10	
7440-62-2	Vanadium	130	10	
7440-66-6	Zinc	1900	10	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Metals in Soil Medium Level by ICP

Client Sample ID: R01-120705BE-0005

Lab Sample ID: AB31002

Date of Collection: 7/5/2012

Matrix: Soil

Date of Digestion: 7/10/2012

Final Volume: 50 mL

Date of Analysis: 7/13/2012

Digestate Dilution: 4

Volume Digested: N/A

pH: N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	8700	44	
7440-36-0	Antimony	ND	8.0	
7440-38-2	Arsenic	36	8.0	
7440-39-3	Barium	290	8.0	
7440-41-7	Beryllium	ND	3.2	
7440-43-9	Cadmium	6.0	4.0	
7440-70-2	Calcium	3500	40	
7440-47-3	Chromium	190	8.0	
7440-48-4	Cobalt	12	8.0	
7440-50-8	Copper	710	8.0	
7439-89-6	Iron	71000	16	
7439-92-1	Lead	810	8.0	
7439-95-4	Magnesium	3000	40	
7439-96-5	Manganese	750	8.0	
7440-02-0	Nickel	160	8.0	
7782-49-2	Selenium	ND	16	
7440-22-4	Silver	ND	4.0	
7440-28-0	Thallium	ND	8.0	
7440-62-2	Vanadium	71	8.0	
7440-66-6	Zinc	1500	8.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Metals in Soil Medium Level by ICP

Client Sample ID:	R01-120705BE-0006	Lab Sample ID:	AB31003
Date of Collection:	7/5/2012	Matrix	Soil
Date of Digestion:	7/10/2012	Final Volume:	50 mL
Date of Analysis:	7/13/2012	Digestate Dilution:	3
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	7700	32	
7440-36-0	Antimony	ND	5.9	
7440-38-2	Arsenic	8.0	5.9	
7440-39-3	Barium	160	5.9	
7440-41-7	Beryllium	ND	2.4	
7440-43-9	Cadmium	ND	2.9	
7440-70-2	Calcium	12000	29	
7440-47-3	Chromium	100	5.9	
7440-48-4	Cobalt	7.3	5.9	
7440-50-8	Copper	540	5.9	
7439-89-6	Iron	42000	12	
7439-92-1	Lead	490	5.9	
7439-95-4	Magnesium	3000	29	
7439-96-5	Manganese	580	5.9	
7440-02-0	Nickel	81	5.9	
7782-49-2	Selenium	ND	12	
7440-22-4	Silver	ND	2.9	
7440-28-0	Thallium	ND	5.9	
7440-62-2	Vanadium	50	5.9	
7440-66-6	Zinc	710	5.9	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Metals in Soil Medium Level by ICP

Client Sample ID: R01-120705BE-0007

Lab Sample ID: AB31004

Date of Collection: 7/5/2012

Matrix: Soil

Date of Digestion: 7/10/2012

Final Volume: 50 mL

Date of Analysis: 7/13/2012

Digestate Dilution: 1

Volume Digested: N/A

pH: N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	12000	11	
7440-36-0	Antimony	ND	1.9	
7440-38-2	Arsenic	3.9	1.9	
7440-39-3	Barium	23	1.9	
7440-41-7	Beryllium	ND	0.77	
7440-43-9	Cadmium	ND	0.96	
7440-70-2	Calcium	1100	9.6	
7440-47-3	Chromium	14	1.9	
7440-48-4	Cobalt	4.6	1.9	
7440-50-8	Copper	8.9	1.9	
7439-89-6	Iron	15000	3.8	
7439-92-1	Lead	18	1.9	
7439-95-4	Magnesium	2300	9.6	
7439-96-5	Manganese	230	1.9	
7440-02-0	Nickel	7.5	1.9	
7782-49-2	Selenium	ND	3.8	
7440-22-4	Silver	ND	0.96	
7440-28-0	Thallium	2.7	1.9	
7440-62-2	Vanadium	26	1.9	
7440-66-6	Zinc	40	1.9	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Metals in Soil Medium Level by ICP

Client Sample ID:	R01-120705BE-0008	Lab Sample ID:	AB31005
Date of Collection:	7/5/2012	Matrix	Soil
Date of Digestion:	7/10/2012	Final Volume:	50 mL
Date of Analysis:	7/13/2012	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	7000	11	
7440-36-0	Antimony	ND	2.0	
7440-38-2	Arsenic	4.6	2.0	
7440-39-3	Barium	63	2.0	
7440-41-7	Beryllium	ND	0.78	
7440-43-9	Cadmium	1.1	0.98	
7440-70-2	Calcium	7400	9.8	
7440-47-3	Chromium	87	2.0	
7440-48-4	Cobalt	7.4	2.0	
7440-50-8	Copper	420	2.0	
7439-89-6	Iron	27000	3.9	
7439-92-1	Lead	240	2.0	
7439-95-4	Magnesium	3100	9.8	
7439-96-5	Manganese	430	2.0	
7440-02-0	Nickel	69	2.0	
7782-49-2	Selenium	ND	3.9	
7440-22-4	Silver	ND	0.98	
7440-28-0	Thallium	3.3	2.0	
7440-62-2	Vanadium	42	2.0	
7440-66-6	Zinc	300	2.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Metals in Soil Medium Level by ICP

Client Sample ID: R01-120705BE-0009

Lab Sample ID: AB31006

Date of Collection: 7/5/2012

Matrix: Soil

Date of Digestion: 7/10/2012

Final Volume: 50 mL

Date of Analysis: 7/13/2012

Digestate Dilution: 3

Volume Digested: N/A

pH: N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	7300	32	
7440-36-0	Antimony	ND	5.9	
7440-38-2	Arsenic	ND	5.9	
7440-39-3	Barium	61	5.9	
7440-41-7	Beryllium	ND	2.4	
7440-43-9	Cadmium	ND	2.9	
7440-70-2	Calcium	4400	29	
7440-47-3	Chromium	370	5.9	
7440-48-4	Cobalt	12	5.9	
7440-50-8	Copper	930	5.9	
7439-89-6	Iron	54000	12	
7439-92-1	Lead	390	5.9	
7439-95-4	Magnesium	3200	29	
7439-96-5	Manganese	670	5.9	
7440-02-0	Nickel	250	5.9	
7782-49-2	Selenium	ND	12	
7440-22-4	Silver	ND	2.9	
7440-28-0	Thallium	ND	5.9	
7440-62-2	Vanadium	59	5.9	
7440-66-6	Zinc	610	5.9	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Metals in Soil Medium Level by ICP

Client Sample ID:	R01-120705BE-0010	Lab Sample ID:	AB31007
Date of Collection:	7/5/2012	Matrix	Soil
Date of Digestion:	7/10/2012	Final Volume:	50 mL
Date of Analysis:	7/13/2012	Digestate Dilution:	5
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	14000	54	
7440-36-0	Antimony	11	9.8	
7440-38-2	Arsenic	16	9.8	
7440-39-3	Barium	330	9.8	
7440-41-7	Beryllium	ND	3.9	
7440-43-9	Cadmium	12	4.9	
7440-70-2	Calcium	6000	49	
7440-47-3	Chromium	560	9.8	
7440-48-4	Cobalt	25	9.8	
7440-50-8	Copper	3500	9.8	
7439-89-6	Iron	120000	20	
7439-92-1	Lead	2200	9.8	
7439-95-4	Magnesium	4600	49	
7439-96-5	Manganese	1300	9.8	
7440-02-0	Nickel	450	9.8	
7782-49-2	Selenium	ND	20	
7440-22-4	Silver	6.1	4.9	
7440-28-0	Thallium	ND	9.8	
7440-62-2	Vanadium	120	9.8	
7440-66-6	Zinc	2500	9.8	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Metals in Soil Medium Level by ICP

Client Sample ID:	R01-120705BE-0012	Lab Sample ID:	AB31008
Date of Collection:	7/5/2012	Matrix	Soil
Date of Digestion:	7/10/2012	Final Volume:	50 mL
Date of Analysis:	7/13/2012	Digestate Dilution:	4
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	9100	42	
7440-36-0	Antimony	ND	7.7	
7440-38-2	Arsenic	37	7.7	
7440-39-3	Barium	320	7.7	
7440-41-7	Beryllium	ND	3.1	
7440-43-9	Cadmium	5.7	3.8	
7440-70-2	Calcium	3600	38	
7440-47-3	Chromium	160	7.7	
7440-48-4	Cobalt	11	7.7	
7440-50-8	Copper	700	7.7	
7439-89-6	Iron	68000	15	
7439-92-1	Lead	960	7.7	
7439-95-4	Magnesium	3100	38	
7439-96-5	Manganese	820	7.7	
7440-02-0	Nickel	130	7.7	
7782-49-2	Selenium	ND	15	
7440-22-4	Silver	ND	3.8	
7440-28-0	Thallium	ND	7.7	
7440-62-2	Vanadium	63	7.7	
7440-66-6	Zinc	2800	7.7	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Metals in Soil Medium Level by ICP

Client Sample ID:	R01-120705BE-0014	Lab Sample ID:	AB31010
Date of Collection:	7/5/2012	Matrix	Lab Sand
Date of Digestion:	7/10/2012	Final Volume:	50 mL
Date of Analysis:	7/13/2012	Digestate Dilution:	1
Volume Digested:	N/A	pH:	N/A

CAS Number	Parameter	Concentration mg/Kg	RL mg/Kg	Qualifier
7429-90-5	Aluminum	2500	11	
7440-36-0	Antimony	73	2.0	
7440-38-2	Arsenic	89	2.0	
7440-39-3	Barium	6.7	2.0	
7440-41-7	Beryllium	28	0.78	
7440-43-9	Cadmium	18	0.98	
7440-70-2	Calcium	990	9.8	
7440-47-3	Chromium	3.5	2.0	
7440-48-4	Cobalt	34	2.0	
7440-50-8	Copper	32	2.0	
7439-89-6	Iron	4200	3.9	
7439-92-1	Lead	43	2.0	
7439-95-4	Magnesium	6900	9.8	
7439-96-5	Manganese	41	2.0	
7440-02-0	Nickel	37	2.0	
7782-49-2	Selenium	17	3.9	
7440-22-4	Silver	9.6	0.98	
7440-28-0	Thallium	ND	2.0	
7440-62-2	Vanadium	150	2.0	
7440-66-6	Zinc	5.1	2.0	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Intervale Street Site - Quincy, MA

Laboratory Reagent Blank

Client Sample ID: N/A
Date of Collection: N/A
Date of Digestion: 7/10/2012
Date of Analysis: 7/13/2012
Volume Digested: N/A

Lab Sample ID: N/A
Matrix: Water
Final Volume: 50 mL
Digestate Dilution: 1
pH: N/A

CAS Number	Parameter	Concentration ug/L	RL ug/L	Qualifier
7429-90-5	Aluminum	ND	110	
7440-36-0	Antimony	ND	20	
7440-38-2	Arsenic	ND	20	
7440-39-3	Barium	ND	20	
7440-41-7	Beryllium	ND	8.0	
7440-43-9	Cadmium	ND	10	
7440-70-2	Calcium	ND	100	
7440-47-3	Chromium	ND	20	
7440-48-4	Cobalt	ND	20	
7440-50-8	Copper	ND	20	
7439-89-6	Iron	ND	40	
7439-92-1	Lead	ND	20	
7439-95-4	Magnesium	ND	100	
7439-96-5	Manganese	ND	20	
7440-02-0	Nickel	ND	20	
7782-49-2	Selenium	ND	40	
7440-22-4	Silver	ND	10	
7440-28-0	Thallium	ND	20	
7440-62-2	Vanadium	ND	20	
7440-66-6	Zinc	ND	20	

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

METALS MATRIX SPIKE (MS) RESULTS

Intervale Street Site - Quincy, MA

Sample ID: AB30998

PARAMETER	SPIKE ADDED mg/Kg	SAMPLE CONCENTRATION mg/Kg	MS CONCENTRATION mg/Kg	MS % REC	QC LIMITS (% REC)
Antimony	98.0	ND	91.6	94	75 - 125
Arsenic	98.0	8.9	105	98	75 - 125
Barium	98.0	1500	400	R	75 - 125
Beryllium	39.2	ND	39.8	102	75 - 125
Cadmium	49.0	6.3	55.3	100	75 - 125
Chromium	98.0	120	191	72	75 - 125
Cobalt	98.0	ND	107	109	75 - 125
Copper	98.0	3200	1090	R	75 - 125
Lead	98.0	3200	3650	R	75 - 125
Manganese	98.0	790	916	R	75 - 125
Nickel	98.0	110	199	91	75 - 125
Selenium	98.0	ND	97.7	100	75 - 125
Silver	19.6	ND	21.4	109	75 - 125
Thallium	98.0	ND	100	102	75 - 125
Vanadium	98.0	28	132	106	75 - 125
Zinc	98.0	1100	1280	R	75 - 125

Comments:

Samples in Batch: AB30998, AB30999, AB31000, AB31001, AB31002, AB31003, AB31004, AB31005, AB31006, AB31007,
AB31008, AB31010

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Duplicate Results

Intervale Street Site - Quincy, MA

Sample ID: AB30999

PARAMETER	SAMPLE RESULT mg/Kg	SAMPLE DUPLICATE RESULT mg/Kg	PRECISION RPD %	QC LIMITS
Aluminum	12000	11000	9	30
Antimony	3.2	3.8	17	30
Arsenic	11	10	10	30
Barium	260	420	47	30
Beryllium	ND	ND	NC	30
Cadmium	5.0	4.8	4	30
Calcium	5900	5500	7	30
Chromium	110	83	28	30
Cobalt	9.0	8.4	7	30
Copper	580	500	15	30
Iron	29000	32000	10	30
Lead	1100	920	18	30
Magnesium	3200	3200	0	30
Manganese	550	540	2	30
Nickel	93	78	18	30
Selenium	ND	ND	NC	30
Silver	0.99	4.3	130	30
Thallium	2.5	3.0	18	30
Vanadium	42	39	7	30
Zinc	1200	1700	0	30

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Laboratory Fortified Blank (LFB) Results

Intervale Street Site - Quincy, MA

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Aluminum	1000	1020	102	85 - 115
Antimony	1000	953	95	85 - 115
Arsenic	1000	936	94	85 - 115
Barium	1000	1020	102	85 - 115
Beryllium	400	377	94	85 - 115
Cadmium	500	473	95	85 - 115
Calcium	10000	10100	101	85 - 115
Chromium	1000	1030	103	85 - 115
Cobalt	1000	999	100	85 - 115
Copper	1000	1050	105	85 - 115
Iron	1000	1010	101	85 - 115
Lead	1000	982	98	85 - 115
Magnesium	10000	9850	99	85 - 115
Manganese	1000	982	98	85 - 115
Nickel	1000	992	99	85 - 115
Selenium	1000	890	89	85 - 115
Silver	200	198	99	85 - 115
Thallium	1000	999	100	85 - 115
Vanadium	1000	1040	104	85 - 115
Zinc	1000	932	93	85 - 115

Comments:

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Solid Laboratory Control Sample (LCS) Results

Intervale Street Site - Quincy, MA

PARAMETER	LCS RESULTS mg/Kg	CONTROL LIMITS mg/Kg
Aluminum	9690	3950 - 12800
Antimony	90.1	2 - 186
Arsenic	94.8	77.8 - 111
Barium	167	140 - 193
Beryllium	56.3	47.8 - 67.4
Cadmium	59.0	50.3 - 70.7
Calcium	6090	5110 - 7180
Chromium	73.9	57.6 - 83.2
Cobalt	104	84.9 - 119
Copper	87.8	66.7 - 92.4
Iron	14500	6330 - 18700
Lead	91.1	75.5 - 108
Magnesium	2670	1960 - 3190
Manganese	291	233 - 332
Nickel	58.7	47.7 - 67.5
Selenium	83.2	69.2 - 104
Silver	36.6	22.8 - 46.1
Thallium	119	93.9 - 145
Vanadium	65.7	41.9 - 72
Zinc	133	115 - 165

Comments:

PROJECT NOTES

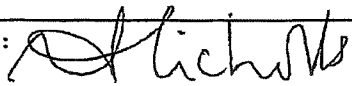
Site Name: Intervale Street Site
Site Code: 01KK
Date: 7/26/2012

PN: 12070007
TO: 82
Task: 02
TDF: 2666

Perkin Elmer Dual View 4300 ICP

Metals in Soil, 12070007, SMETMS PE

- Matrix Spike analysis was performed on sample AB30998. No percent recoveries (%RECs) were calculated for barium, copper, lead, manganese and zinc since these analyte concentrations were greater than four times the spike levels. The %REC for chromium was outside the quality control (QC) limits; this result was qualified as estimated J1.
- Laboratory Duplicate analysis was performed on sample AB30999. The Relative Percent Differences (RPDs) for barium and silver were outside the QC acceptance limits; these results were qualified as estimated J3. ✓
- Calcium (76.74 µg/L) and iron (23.03 µg/L) were found in the Laboratory Reagent Blank (LRB) at concentrations > ½ the reporting limits; however the observed concentrations of calcium and iron in all samples were greater than 10 times the concentrations found in the LRB. Qualification of the calcium and iron results was not required on this basis. ✓
- Since this project is from a new site, serial dilutions and post spikes are included in the data package. ✓
- It should be mentioned that the InterElement Correction (IEC) factors were checked and verified for iron due to performance prior to the analysis of the reported results. A Preventative Maintenance (PM) is scheduled for the instrument; it might be worth it to adhere to the schedule so that the torch in use can be switched out and all performance verifications can be re-established.
- Several Samples were re-analyzed at dilutions due to high analyte concentrations; the reporting limits were raised accordingly.
- The reporting limit (RL) for selenium was raised since the concentration of selenium in at least one of the Interference Check Samples (IFCSA) was greater than ½ the reporting limit. ✓

Signature: 

Date: 7/26/2012

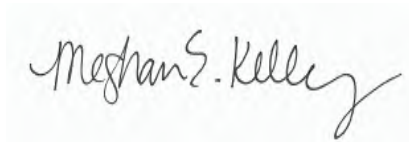
May 2, 2013

Olaf Westphalen
Watermark Environmental, Inc.
175 Cabot Street, Suite 501
Lowell, MA 01854

Project Location: 175 Intervale St., Quincy, MA
Client Job Number:
Project Number: [none]
Laboratory Work Order Number: 13D0894

Enclosed are results of analyses for samples received by the laboratory on April 23, 2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Meghan E. Kelley". The signature is written in a cursive, flowing style.

Meghan E. Kelley
Project Manager

Watermark Environmental, Inc.
175 Cabot Street, Suite 501
Lowell, MA 01854
ATTN: Olaf Westphalen

REPORT DATE: 5/2/2013

PURCHASE ORDER NUMBER: W13-7265

PROJECT NUMBER: [none]

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 13D0894

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: 175 Intervale St., Quincy, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-4R	13D0894-01	Ground Water		MADEP-EPH-04-1.1	
				MADEP-VPH-04-1.1	
				SW-846 6020A	
				SW-846 7196A	
				SW-846 7470A	
MW-1R	13D0894-02	Ground Water		SW-846 8260C	
				MADEP-EPH-04-1.1	
				MADEP-VPH-04-1.1	
				SW-846 6020A	
				SW-846 7196A	
MW-3R	13D0894-03	Ground Water		SW-846 7470A	
				SW-846 8260C	
				MADEP-EPH-04-1.1	
				MADEP-VPH-04-1.1	
				SW-846 6020A	
MW-3R (DUP)	13D0894-04	Ground Water		SW-846 7196A	
				SW-846 7470A	
				SW-846 8260C	
				MADEP-EPH-04-1.1	
				MADEP-VPH-04-1.1	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method MA VPH, only hydrocarbon ranges were requested and reported

MADEP-VPH-04-1.1**Qualifications:**

Potential false positive result due to a non-petroleum hydrocarbon peak or peaks within the aliphatic/aromatic range.

Analyte & Samples(s) Qualified:

C9-C10 Aromatics, C9-C12 Aliphatics, Unadjusted C9-C12 Aliphatics

13D0894-01[MW-4R], 13D0894-03[MW-3R], 13D0894-04[MW-3R (DUP)]

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:

2,2,4-Trimethylpentane

B071856-BS1, B071856-BSD1

SW-846 6020A**Qualifications:**

Sample required a dilution due to low internal standard recovery of the lesser diluted digestion, reporting limit is elevated.

Analyte & Samples(s) Qualified:

Lead, Thallium

13D0894-03[MW-3R]

SW-846 8260C**Qualifications:**

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Carbon Disulfide, Diisopropyl Ether (DIPE)

B071755-BS1, B071755-BSD1

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

1,2,3-Trichlorobenzene, Naphthalene

13D0894-01[MW-4R], 13D0894-03[MW-3R], 13D0894-04[MW-3R (DUP)], B071701-BLK1, B071701-BS1, B071701-BSD1

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the high side.

Analyte & Samples(s) Qualified:

Acetone

B071701-BS1, B071701-BSD1

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Carbon Disulfide

B071701-BS1

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:**1,2,3-Trichlorobenzene, Naphthalene**

B071755-BSD1

Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.

Analyte & Samples(s) Qualified:**2-Butanone (MEK), Acetone, Bromomethane, Dichlorodifluoromethane (Freon 12)**

B071701-BS1, B071701-BSD1, B071755-BS1

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:**1,2,3-Trichlorobenzene, 1,2-Dibromo-3-chloropropane (DBCP), 2,2-Dichloropropane, 2-Butanone (MEK), Acetone, Bromomethane, Chloromethane, Naphthalene, tert-Amyl Methyl Ether (TAME), tert-Butyl Ethyl Ether (TBEE)**

13D0894-02[MW-1R], B071755-BLK1, B071755-BS1, B071755-BSD1, 13D0894-01[MW-4R], 13D0894-03[MW-3R], 13D0894-04[MW-3R (DUP)], B071701-BLK1, B071701-BS1, B071701-BSD1

Elevated reporting limit based on lowest point in calibration.
MA CAM reporting limit not met.

Analyte & Samples(s) Qualified:**Carbon Disulfide, Methylene Chloride, tert-Amyl Methyl Ether (TAME), tert-Butyl Ethyl Ether (TBEE)**

13D0894-01[MW-4R], 13D0894-02[MW-1R], 13D0894-03[MW-3R], 13D0894-04[MW-3R (DUP)]

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,2-Dibromo-3-chloropropane (DBCP), Chloromethane, Naphthalene**

13D0894-01[MW-4R], 13D0894-02[MW-1R], 13D0894-03[MW-3R], 13D0894-04[MW-3R (DUP)], B071701-BLK1, B071701-BS1, B071701-BSD1, B071755-BLK1, B071755-BS1, B071755-BSD1

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

Analyte & Samples(s) Qualified:**1,4-Dioxane**

13D0894-01[MW-4R], 13D0894-02[MW-1R], 13D0894-03[MW-3R], 13D0894-04[MW-3R (DUP)], B071701-BLK1, B071701-BS1, B071701-BSD1, B071755-BLK1, B071755-BS1, B071755-BSD1

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**Bromomethane, Carbon Disulfide, Chloromethane**

B071755-BS1, B071755-BSD1, B071701-BS1, B071701-BSD1

MADEP-EPH-04-1.1

SPE cartridge contamination with non-petroleum compounds, if present, is verified by GC/MS in each method blank per extraction batch and excluded from C11-C22 aromatic range fraction in all samples in the batch. No significant modifications were made to the method.

MADEP-VPH-04-1.1

No significant modifications were made to the method. All VPH samples were received preserved properly at pH <2 in the proper containers as specified on the chain-of-custody form unless specified in this narrative.

SW-846 8260C

Laboratory control sample recoveries for required MCP Data Enhancement 8260 compounds were all within limits specified by the method except for "difficult analytes" where recovery control limits of 40-160% are used and/or unless otherwise listed in this narrative. Difficult analytes: MIBK, MEK, acetone, 1,4-dioxane, chloromethane, dichlorodifluoromethane, 2-hexanone, and bromomethane.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Daren J. Damboragian", is written over a light gray rectangular background.

Daren J. Damboragian
Laboratory Manager

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-4R

Sampled: 4/23/2013 10:45

Sample ID: 13D0894-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
tert-Amyl Methyl Ether (TAME)	12	5.0	µg/L	1	R-05, RL-07	SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Benzene	2.9	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	4/24/13	4/24/13 18:08	EEH
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	1	R-05, RL-07	SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Chloromethane	ND	2.0	µg/L	1	R-05, V-05	SW-846 8260C	4/24/13	4/24/13 18:08	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L	1	V-05	SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	R-05	SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
cis-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
trans-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-4R

Sampled: 4/23/2013 10:45

Sample ID: 13D0894-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Isopropylbenzene (Cumene)	1.1	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Methyl tert-Butyl Ether (MTBE)	60	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/24/13	4/24/13 18:08	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Naphthalene	26	2.0	µg/L	1	L-04, V-05	SW-846 8260C	4/24/13	4/24/13 18:08	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,2,3-Trichlorobenzene	ND	2.0	µg/L	1	L-04, V-05	SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,2,4-Trimethylbenzene	3.0	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH
o-Xylene	1.8	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 18:08	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	99.6	70-130	4/24/13 18:08
Toluene-d8	102	70-130	4/24/13 18:08
4-Bromofluorobenzene	99.4	70-130	4/24/13 18:08

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-4R

Sampled: 4/23/2013 10:45

Sample ID: 13D0894-01

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Unadjusted C11-C22 Aromatics	700	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
C11-C22 Aromatics	490	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Acenaphthene	87	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Fluoranthene	2.3	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Fluorene	29	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
2-Methylnaphthalene	33	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Naphthalene	20	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Phenanthrene	33	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:00	CJM

Surrogates	% Recovery	Recovery Limits	Flag
Chlorooctadecane (COD)	44.7	40-140	
o-Terphenyl (OTP)	56.6	40-140	
2-Bromonaphthalene	78.8	40-140	
2-Fluorobiphenyl	85.1	40-140	

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-4R

Sampled: 4/23/2013 10:45

Sample ID: 13D0894-01

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	100	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 14:56	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 14:56	EEH
Unadjusted C9-C12 Aliphatics	320	100	µg/L	1	Q-01	MADEP-VPH-04-1.1	4/26/13	4/26/13 14:56	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 14:56	EEH
C9-C10 Aromatics	300	100	µg/L	1	Q-01	MADEP-VPH-04-1.1	4/26/13	4/26/13 14:56	EEH
Surrogates	% Recovery		Recovery Limits		Flag				
2,5-Dibromotoluene (FID)	100		70-130				4/26/13 14:56		
2,5-Dibromotoluene (PID)	103		70-130				4/26/13 14:56		

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-4R

Sampled: 4/23/2013 10:45

Sample ID: 13D0894-01

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 10:57	KSH
Arsenic	1.8	0.40	µg/L	1		SW-846 6020A	4/24/13	4/25/13 10:57	KSH
Barium	380	50	µg/L	5		SW-846 6020A	4/24/13	4/25/13 11:51	KSH
Beryllium	ND	0.40	µg/L	1		SW-846 6020A	4/24/13	4/25/13 10:57	KSH
Cadmium	ND	0.50	µg/L	1		SW-846 6020A	4/24/13	4/25/13 10:57	KSH
Chromium	ND	1.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 10:57	KSH
Lead	ND	1.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 10:57	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	4/24/13	4/24/13 15:04	SAJ
Nickel	5.6	5.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 10:57	KSH
Selenium	ND	5.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 10:57	KSH
Silver	ND	0.50	µg/L	1		SW-846 6020A	4/24/13	4/25/13 10:57	KSH
Thallium	ND	0.20	µg/L	1		SW-846 6020A	4/24/13	4/25/13 10:57	KSH
Vanadium	ND	5.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 10:57	KSH
Zinc	ND	10	µg/L	1		SW-846 6020A	4/24/13	4/25/13 10:57	KSH

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-4R

Sampled: 4/23/2013 10:45

Sample ID: 13D0894-01

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	4/24/13	4/24/13 8:25	LL

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-1R

Sampled: 4/23/2013 09:35

Sample ID: 13D0894-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1	R-05	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
2-Butanone (MEK)	ND	10	µg/L	1	R-05	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Chloromethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L	1	R-05, V-05	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
cis-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
cis-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
trans-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-1R

Sampled: 4/23/2013 09:35

Sample ID: 13D0894-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Naphthalene	ND	2.0	µg/L	1	R-05, V-05	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Tetrachloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,2,3-Trichlorobenzene	ND	2.0	µg/L	1	R-05, V-05	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	V-05	SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Trichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	4/25/13	4/26/13 12:44	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	102	70-130	4/26/13 12:44
Toluene-d8	101	70-130	4/26/13 12:44
4-Bromofluorobenzene	101	70-130	4/26/13 12:44

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-1R

Sampled: 4/23/2013 09:35

Sample ID: 13D0894-02

Sample Matrix: Ground Water

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Unadjusted C11-C22 Aromatics	110	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
C11-C22 Aromatics	110	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:21	CJM

Surrogates	% Recovery	Recovery Limits	Flag
Chlorooctadecane (COD)	52.5	40-140	
o-Terphenyl (OTP)	68.8	40-140	
2-Bromonaphthalene	92.7	40-140	
2-Fluorobiphenyl	95.9	40-140	

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-1R

Sampled: 4/23/2013 09:35

Sample ID: 13D0894-02

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 15:31	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 15:31	EEH
Unadjusted C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 15:31	EEH
C9-C12 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 15:31	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 15:31	EEH
Surrogates	% Recovery		Recovery Limits		Flag				
2,5-Dibromotoluene (FID)	99.6		70-130				4/26/13 15:31		
2,5-Dibromotoluene (PID)	97.9		70-130				4/26/13 15:31		

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-1R

Sampled: 4/23/2013 09:35

Sample ID: 13D0894-02

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	1.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH
Arsenic	1.7	0.40	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH
Barium	85	10	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH
Beryllium	ND	0.40	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH
Cadmium	ND	0.50	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH
Chromium	ND	1.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH
Lead	ND	1.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	4/24/13	4/24/13 15:05	SAJ
Nickel	6.5	5.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH
Selenium	ND	5.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH
Silver	ND	0.50	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH
Thallium	ND	0.20	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH
Vanadium	ND	5.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH
Zinc	ND	10	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:07	KSH

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-1R

Sampled: 4/23/2013 09:35

Sample ID: 13D0894-02

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	4/24/13	4/24/13 8:25	LL

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-3R

Sampled: 4/23/2013 11:35

Sample ID: 13D0894-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	1	R-05, RL-07	SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	4/24/13	4/24/13 19:01	EEH
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	1	R-05, RL-07	SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Chloromethane	ND	2.0	µg/L	1	R-05, V-05	SW-846 8260C	4/24/13	4/24/13 19:01	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L	1	V-05	SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
cis-1,2-Dichloroethylene	5.6	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	R-05	SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
cis-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
trans-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-3R

Sampled: 4/23/2013 11:35

Sample ID: 13D0894-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/24/13	4/24/13 19:01	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Naphthalene	ND	2.0	µg/L	1	L-04, V-05	SW-846 8260C	4/24/13	4/24/13 19:01	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Tetrachloroethylene	17	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,2,3-Trichlorobenzene	ND	2.0	µg/L	1	L-04, V-05	SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Trichloroethylene	5.5	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:01	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	101	70-130	
Toluene-d8	96.9	70-130	
4-Bromofluorobenzene	100	70-130	

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-3R

Sampled: 4/23/2013 11:35

Sample ID: 13D0894-03

Sample Matrix: Ground Water

Petrolium Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Unadjusted C11-C22 Aromatics	130	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
C11-C22 Aromatics	130	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 17:42	CJM

Surrogates	% Recovery	Recovery Limits	Flag
Chlorooctadecane (COD)	54.6	40-140	
o-Terphenyl (OTP)	68.0	40-140	
2-Bromonaphthalene	87.5	40-140	
2-Fluorobiphenyl	89.2	40-140	

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-3R

Sampled: 4/23/2013 11:35

Sample ID: 13D0894-03

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 16:08	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 16:08	EEH
Unadjusted C9-C12 Aliphatics	100	100	µg/L	1	Q-01	MADEP-VPH-04-1.1	4/26/13	4/26/13 16:08	EEH
C9-C12 Aliphatics	100	100	µg/L	1	Q-01	MADEP-VPH-04-1.1	4/26/13	4/26/13 16:08	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 16:08	EEH
Surrogates	% Recovery		Recovery Limits		Flag				
2,5-Dibromotoluene (FID)	97.1		70-130				4/26/13 16:08		
2,5-Dibromotoluene (PID)	95.0		70-130				4/26/13 16:08		

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-3R

Sampled: 4/23/2013 11:35

Sample ID: 13D0894-03

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	1.7	1.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:24	KSH
Arsenic	1.2	0.40	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:24	KSH
Barium	220	50	µg/L	5		SW-846 6020A	4/24/13	4/25/13 11:58	KSH
Beryllium	ND	0.40	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:24	KSH
Cadmium	2.1	0.50	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:24	KSH
Chromium	ND	1.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:24	KSH
Lead	ND	2.0	µg/L	2	Z-01	SW-846 6020A	4/24/13	4/25/13 11:55	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	4/24/13	4/24/13 15:07	SAJ
Nickel	16	5.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:24	KSH
Selenium	ND	5.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:24	KSH
Silver	ND	0.50	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:24	KSH
Thallium	ND	0.40	µg/L	2	Z-01	SW-846 6020A	4/24/13	4/25/13 11:55	KSH
Vanadium	ND	5.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:24	KSH
Zinc	470	50	µg/L	5		SW-846 6020A	4/24/13	4/25/13 11:58	KSH

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-3R

Sampled: 4/23/2013 11:35

Sample ID: 13D0894-03

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	4/24/13	4/24/13 8:25	LL

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-3R (DUP)

Sampled: 4/23/2013 11:35

Sample ID: 13D0894-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	10	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L	1	R-05, RL-07	SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Benzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Bromobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Bromochloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Bromodichloromethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Bromoform	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Bromomethane	ND	2.0	µg/L	1	R-05	SW-846 8260C	4/24/13	4/24/13 19:27	EEH
2-Butanone (MEK)	ND	10	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
n-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
sec-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
tert-Butylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L	1	RL-07, R-05	SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Carbon Disulfide	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Carbon Tetrachloride	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Chlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Chlorodibromomethane	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Chloroethane	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Chloroform	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Chloromethane	ND	2.0	µg/L	1	R-05, V-05	SW-846 8260C	4/24/13	4/24/13 19:27	EEH
2-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
4-Chlorotoluene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L	1	V-05	SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,2-Dibromoethane (EDB)	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Dibromomethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,2-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,3-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,4-Dichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,1-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,2-Dichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,1-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
cis-1,2-Dichloroethylene	5.3	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
trans-1,2-Dichloroethylene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,2-Dichloropropane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,3-Dichloropropane	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
2,2-Dichloropropane	ND	1.0	µg/L	1	R-05	SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,1-Dichloropropene	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
cis-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
trans-1,3-Dichloropropene	ND	0.40	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Diethyl Ether	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Diisopropyl Ether (DIPE)	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,4-Dioxane	ND	50	µg/L	1	V-16	SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Ethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-3R (DUP)

Sampled: 4/23/2013 11:35

Sample ID: 13D0894-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobutadiene	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
2-Hexanone (MBK)	ND	10	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Isopropylbenzene (Cumene)	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Methylene Chloride	ND	5.0	µg/L	1	RL-07	SW-846 8260C	4/24/13	4/24/13 19:27	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Naphthalene	ND	2.0	µg/L	1	L-04, V-05	SW-846 8260C	4/24/13	4/24/13 19:27	EEH
n-Propylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Styrene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Tetrachloroethylene	18	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Tetrahydrofuran	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Toluene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,2,3-Trichlorobenzene	ND	2.0	µg/L	1	L-04, V-05	SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,1,1-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,1,2-Trichloroethane	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Trichloroethylene	5.7	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,2,3-Trichloropropane	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
Vinyl Chloride	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
m+p Xylene	ND	2.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH
o-Xylene	ND	1.0	µg/L	1		SW-846 8260C	4/24/13	4/24/13 19:27	EEH

Surrogates	% Recovery	Recovery Limits	Flag
1,2-Dichloroethane-d4	98.4	70-130	4/24/13 19:27
Toluene-d8	101	70-130	4/24/13 19:27
4-Bromofluorobenzene	99.9	70-130	4/24/13 19:27

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-3R (DUP)

Sampled: 4/23/2013 11:35

Sample ID: 13D0894-04

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - EPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
C9-C18 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
C19-C36 Aliphatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Unadjusted C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
C11-C22 Aromatics	ND	100	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Acenaphthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Acenaphthylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Benzo(a)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Benzo(a)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Benzo(b)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Benzo(g,h,i)perylene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Benzo(k)fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Chrysene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Dibenz(a,h)anthracene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Fluoranthene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Fluorene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
2-Methylnaphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Naphthalene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Phenanthrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM
Pyrene	ND	2.0	µg/L	1		MADEP-EPH-04-1.1	4/25/13	4/30/13 18:03	CJM

Surrogates	% Recovery	Recovery Limits	Flag
Chlorooctadecane (COD)	54.8	40-140	
o-Terphenyl (OTP)	65.5	40-140	
2-Bromonaphthalene	90.7	40-140	
2-Fluorobiphenyl	94.2	40-140	

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-3R (DUP)

Sampled: 4/23/2013 11:35

Sample ID: 13D0894-04

Sample Matrix: Ground Water

Petroleum Hydrocarbons Analyses - VPH

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Unadjusted C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 18:05	EEH
C5-C8 Aliphatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 18:05	EEH
Unadjusted C9-C12 Aliphatics	100	100	µg/L	1	Q-01	MADEP-VPH-04-1.1	4/26/13	4/26/13 18:05	EEH
C9-C12 Aliphatics	100	100	µg/L	1	Q-01	MADEP-VPH-04-1.1	4/26/13	4/26/13 18:05	EEH
C9-C10 Aromatics	ND	100	µg/L	1		MADEP-VPH-04-1.1	4/26/13	4/26/13 18:05	EEH
Surrogates	% Recovery		Recovery Limits		Flag				
2,5-Dibromotoluene (FID)	97.7		70-130				4/26/13 18:05		
2,5-Dibromotoluene (PID)	96.7		70-130				4/26/13 18:05		

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-3R (DUP)

Sampled: 4/23/2013 11:35

Sample ID: 13D0894-04

Sample Matrix: Ground Water

Metals Analyses (Dissolved)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	1.6	1.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:44	KSH
Arsenic	1.7	0.40	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:44	KSH
Barium	210	50	µg/L	5		SW-846 6020A	4/24/13	4/25/13 12:02	KSH
Beryllium	ND	0.40	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:44	KSH
Cadmium	1.9	0.50	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:44	KSH
Chromium	ND	1.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:44	KSH
Lead	1.3	1.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:44	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	4/24/13	4/24/13 15:09	SAJ
Nickel	14	5.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:44	KSH
Selenium	ND	5.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:44	KSH
Silver	ND	0.50	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:44	KSH
Thallium	ND	0.20	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:44	KSH
Vanadium	ND	5.0	µg/L	1		SW-846 6020A	4/24/13	4/25/13 11:44	KSH
Zinc	440	50	µg/L	5		SW-846 6020A	4/24/13	4/25/13 12:02	KSH

Project Location: 175 Intervale St., Quincy, MA

Sample Description:

Work Order: 13D0894

Date Received: 4/23/2013

Field Sample #: MW-3R (DUP)

Sampled: 4/23/2013 11:35

Sample ID: 13D0894-04

Sample Matrix: Ground Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexavalent Chromium	ND	0.0040	mg/L	1		SW-846 7196A	4/24/13	4/24/13 8:25	LL

Sample Extraction Data

Prep Method: SW-846 3510C-MADEP-EPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0894-01 [MW-4R]	B071775	1000	2.00	04/25/13
13D0894-02 [MW-1R]	B071775	1000	2.00	04/25/13
13D0894-03 [MW-3R]	B071775	1000	2.00	04/25/13
13D0894-04 [MW-3R (DUP)]	B071775	1000	2.00	04/25/13

Prep Method: MA VPH-MADEP-VPH-04-1.1

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0894-01 [MW-4R]	B071856	5	5.00	04/26/13
13D0894-02 [MW-1R]	B071856	5	5.00	04/26/13
13D0894-03 [MW-3R]	B071856	5	5.00	04/26/13
13D0894-04 [MW-3R (DUP)]	B071856	5	5.00	04/26/13

Prep Method: SW-846 3005A Dissolved-SW-846 6020A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0894-01 [MW-4R]	B071725	50.0	50.0	04/24/13
13D0894-02 [MW-1R]	B071725	50.0	50.0	04/24/13
13D0894-03 [MW-3R]	B071725	50.0	50.0	04/24/13
13D0894-04 [MW-3R (DUP)]	B071725	50.0	50.0	04/24/13

SW-846 7196A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0894-01 [MW-4R]	B071672	50.0	50.0	04/24/13
13D0894-02 [MW-1R]	B071672	50.0	50.0	04/24/13
13D0894-03 [MW-3R]	B071672	50.0	50.0	04/24/13
13D0894-04 [MW-3R (DUP)]	B071672	50.0	50.0	04/24/13

Prep Method: SW-846 7470A Prep-SW-846 7470A

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0894-01 [MW-4R]	B071685	6.00	6.00	04/24/13
13D0894-02 [MW-1R]	B071685	6.00	6.00	04/24/13
13D0894-03 [MW-3R]	B071685	6.00	6.00	04/24/13
13D0894-04 [MW-3R (DUP)]	B071685	6.00	6.00	04/24/13

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0894-01 [MW-4R]	B071701	5	5.00	04/24/13
13D0894-03 [MW-3R]	B071701	5	5.00	04/24/13
13D0894-04 [MW-3R (DUP)]	B071701	5	5.00	04/24/13

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
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Sample Extraction Data

Prep Method: SW-846 5030B-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
13D0894-02 [MW-1R]	B071755	5	5.00	04/25/13

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071701 - SW-846 5030B										
Blank (B071701-BLK1)										
Prepared & Analyzed: 04/24/13										
Acetone	ND	10	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L							R-05
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	1.0	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							R-05
2-Butanone (MEK)	ND	10	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L							R-05
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	1.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							R-05, V-05
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L							V-05
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							R-05
1,1-Dichloropropene	ND	0.50	µg/L							
cis-1,3-Dichloropropene	ND	0.40	µg/L							
trans-1,3-Dichloropropene	ND	0.40	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							V-05, L-04

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071701 - SW-846 5030B										
Blank (B071701-BLK1)										
Prepared & Analyzed: 04/24/13										
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	2.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	2.0	µg/L							L-04, V-05
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	23.7		µg/L	25.0		94.8	70-130			
Surrogate: Toluene-d8	24.7		µg/L	25.0		98.7	70-130			
Surrogate: 4-Bromofluorobenzene	24.9		µg/L	25.0		99.6	70-130			
LCS (B071701-BS1)										
Prepared & Analyzed: 04/24/13										
Acetone	169	10	µg/L	100		169	* 40-160			L-06 †
tert-Amyl Methyl Ether (TAME)	9.49	5.0	µg/L	10.0		94.9	70-130			R-05
Benzene	10.8	1.0	µg/L	10.0		108	70-130			
Bromobenzene	10.5	1.0	µg/L	10.0		105	70-130			
Bromochloromethane	10.9	1.0	µg/L	10.0		109	70-130			
Bromodichloromethane	10.2	1.0	µg/L	10.0		102	70-130			
Bromoform	9.09	1.0	µg/L	10.0		90.9	70-130			
Bromomethane	4.88	2.0	µg/L	10.0		48.8	40-160			L-14, R-05 †
2-Butanone (MEK)	136	10	µg/L	100		136	40-160			L-14 †
n-Butylbenzene	11.1	1.0	µg/L	10.0		111	70-130			
sec-Butylbenzene	12.0	1.0	µg/L	10.0		120	70-130			
tert-Butylbenzene	12.0	1.0	µg/L	10.0		120	70-130			
tert-Butyl Ethyl Ether (TBEE)	9.91	5.0	µg/L	10.0		99.1	70-130			R-05
Carbon Disulfide	13.5	5.0	µg/L	10.0		135	* 70-130			V-20, L-07
Carbon Tetrachloride	10.7	1.0	µg/L	10.0		107	70-130			
Chlorobenzene	11.0	1.0	µg/L	10.0		110	70-130			
Chlorodibromomethane	10.2	0.50	µg/L	10.0		102	70-130			
Chloroethane	10.9	2.0	µg/L	10.0		109	70-130			
Chloroform	9.77	2.0	µg/L	10.0		97.7	70-130			
Chloromethane	7.05	2.0	µg/L	10.0		70.5	40-160			R-05, V-05 †
2-Chlorotoluene	11.3	1.0	µg/L	10.0		113	70-130			
4-Chlorotoluene	11.7	1.0	µg/L	10.0		117	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	7.07	2.0	µg/L	10.0		70.7	70-130			V-05
1,2-Dibromoethane (EDB)	9.92	0.50	µg/L	10.0		99.2	70-130			
Dibromomethane	9.74	1.0	µg/L	10.0		97.4	70-130			
1,2-Dichlorobenzene	10.9	1.0	µg/L	10.0		109	70-130			
1,3-Dichlorobenzene	11.4	1.0	µg/L	10.0		114	70-130			
1,4-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071701 - SW-846 5030B										
LCS (B071701-BS1)				Prepared & Analyzed: 04/24/13						
Dichlorodifluoromethane (Freon 12)	6.34	2.0	µg/L	10.0		63.4	40-160			L-14 †
1,1-Dichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
1,2-Dichloroethane	9.52	1.0	µg/L	10.0		95.2	70-130			
1,1-Dichloroethylene	11.2	1.0	µg/L	10.0		112	70-130			
cis-1,2-Dichloroethylene	10.6	1.0	µg/L	10.0		106	70-130			
trans-1,2-Dichloroethylene	11.9	1.0	µg/L	10.0		119	70-130			
1,2-Dichloropropane	10.6	1.0	µg/L	10.0		106	70-130			
1,3-Dichloropropane	9.81	0.50	µg/L	10.0		98.1	70-130			
2,2-Dichloropropane	9.45	1.0	µg/L	10.0		94.5	70-130			R-05
1,1-Dichloropropene	11.0	0.50	µg/L	10.0		110	70-130			
cis-1,3-Dichloropropene	10.2	0.40	µg/L	10.0		102	70-130			
trans-1,3-Dichloropropene	10.8	0.40	µg/L	10.0		108	70-130			
Diethyl Ether	10.6	2.0	µg/L	10.0		106	70-130			
Diisopropyl Ether (DIPE)	12.6	0.50	µg/L	10.0		126	70-130			
1,4-Dioxane	93.7	50	µg/L	100		93.7	40-160			V-16 †
Ethylbenzene	10.7	1.0	µg/L	10.0		107	70-130			
Hexachlorobutadiene	10.0	0.50	µg/L	10.0		100	70-130			
2-Hexanone (MBK)	124	10	µg/L	100		124	40-160			†
Isopropylbenzene (Cumene)	11.1	1.0	µg/L	10.0		111	70-130			
p-Isopropyltoluene (p-Cymene)	11.4	1.0	µg/L	10.0		114	70-130			
Methyl tert-Butyl Ether (MTBE)	9.84	1.0	µg/L	10.0		98.4	70-130			
Methylene Chloride	11.4	5.0	µg/L	10.0		114	70-130			
4-Methyl-2-pentanone (MIBK)	94.1	10	µg/L	100		94.1	40-160			†
Naphthalene	5.73	2.0	µg/L	10.0		57.3	* 70-130			L-04, V-05
n-Propylbenzene	11.6	1.0	µg/L	10.0		116	70-130			
Styrene	10.7	1.0	µg/L	10.0		107	70-130			
1,1,1,2-Tetrachloroethane	10.7	1.0	µg/L	10.0		107	70-130			
1,1,2,2-Tetrachloroethane	8.60	0.50	µg/L	10.0		86.0	70-130			
Tetrachloroethylene	11.1	1.0	µg/L	10.0		111	70-130			
Tetrahydrofuran	10.4	2.0	µg/L	10.0		104	70-130			
Toluene	10.8	1.0	µg/L	10.0		108	70-130			
1,2,3-Trichlorobenzene	5.89	2.0	µg/L	10.0		58.9	* 70-130			L-04, V-05
1,2,4-Trichlorobenzene	8.36	1.0	µg/L	10.0		83.6	70-130			
1,1,1-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130			
1,1,2-Trichloroethane	10.0	1.0	µg/L	10.0		100	70-130			
Trichloroethylene	10.4	1.0	µg/L	10.0		104	70-130			
Trichlorofluoromethane (Freon 11)	9.96	2.0	µg/L	10.0		99.6	70-130			
1,2,3-Trichloropropane	8.77	2.0	µg/L	10.0		87.7	70-130			
1,2,4-Trimethylbenzene	11.0	1.0	µg/L	10.0		110	70-130			
1,3,5-Trimethylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
Vinyl Chloride	8.61	2.0	µg/L	10.0		86.1	70-130			
m+p Xylene	22.7	2.0	µg/L	20.0		114	70-130			
o-Xylene	11.0	1.0	µg/L	10.0		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	24.4		µg/L	25.0		97.5	70-130			
Surrogate: Toluene-d8	25.4		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	24.8		µg/L	25.0		99.4	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071701 - SW-846 5030B										
LCS Dup (B071701-BSD1)				Prepared & Analyzed: 04/24/13						
Acetone	163	10	µg/L	100		163	* 40-160	3.18	20	L-06 †
tert-Amyl Methyl Ether (TAME)	12.2	5.0	µg/L	10.0		122	70-130	24.6	* 20	R-05
Benzene	10.9	1.0	µg/L	10.0		109	70-130	1.66	20	
Bromobenzene	10.4	1.0	µg/L	10.0		104	70-130	1.43	20	
Bromochloromethane	11.0	1.0	µg/L	10.0		110	70-130	0.183	20	
Bromodichloromethane	10.5	1.0	µg/L	10.0		105	70-130	2.71	20	
Bromoform	9.13	1.0	µg/L	10.0		91.3	70-130	0.439	20	
Bromomethane	6.40	2.0	µg/L	10.0		64.0	40-160	27.0	* 20	L-14, R-05 †
2-Butanone (MEK)	131	10	µg/L	100		131	40-160	4.06	20	L-14 †
n-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130	1.91	20	
sec-Butylbenzene	11.9	1.0	µg/L	10.0		119	70-130	0.839	20	
tert-Butylbenzene	11.1	1.0	µg/L	10.0		111	70-130	7.77	20	
tert-Butyl Ethyl Ether (TBEE)	12.5	5.0	µg/L	10.0		125	70-130	23.1	* 20	R-05
Carbon Disulfide	12.8	5.0	µg/L	10.0		128	70-130	5.08	20	V-20
Carbon Tetrachloride	10.6	1.0	µg/L	10.0		106	70-130	1.03	20	
Chlorobenzene	10.9	1.0	µg/L	10.0		109	70-130	1.64	20	
Chlorodibromomethane	10.4	0.50	µg/L	10.0		104	70-130	1.36	20	
Chloroethane	11.2	2.0	µg/L	10.0		112	70-130	2.89	20	
Chloroform	9.86	2.0	µg/L	10.0		98.6	70-130	0.917	20	
Chloromethane	9.10	2.0	µg/L	10.0		91.0	40-160	25.4	* 20	R-05, V-05 †
2-Chlorotoluene	11.2	1.0	µg/L	10.0		112	70-130	0.892	20	
4-Chlorotoluene	11.2	1.0	µg/L	10.0		112	70-130	4.20	20	
1,2-Dibromo-3-chloropropane (DBCP)	7.18	2.0	µg/L	10.0		71.8	70-130	1.54	20	V-05
1,2-Dibromoethane (EDB)	9.97	0.50	µg/L	10.0		99.7	70-130	0.503	20	
Dibromomethane	10.1	1.0	µg/L	10.0		101	70-130	3.33	20	
1,2-Dichlorobenzene	11.0	1.0	µg/L	10.0		110	70-130	1.10	20	
1,3-Dichlorobenzene	11.3	1.0	µg/L	10.0		113	70-130	1.32	20	
1,4-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130	1.16	20	
Dichlorodifluoromethane (Freon 12)	6.46	2.0	µg/L	10.0		64.6	40-160	1.87	20	L-14 †
1,1-Dichloroethane	10.8	1.0	µg/L	10.0		108	70-130	0.185	20	
1,2-Dichloroethane	9.60	1.0	µg/L	10.0		96.0	70-130	0.837	20	
1,1-Dichloroethylene	10.9	1.0	µg/L	10.0		109	70-130	3.07	20	
cis-1,2-Dichloroethylene	10.5	1.0	µg/L	10.0		105	70-130	1.23	20	
trans-1,2-Dichloroethylene	11.6	1.0	µg/L	10.0		116	70-130	2.65	20	
1,2-Dichloropropane	10.9	1.0	µg/L	10.0		109	70-130	2.23	20	
1,3-Dichloropropane	10.0	0.50	µg/L	10.0		100	70-130	2.22	20	
2,2-Dichloropropane	11.8	1.0	µg/L	10.0		118	70-130	22.3	* 20	R-05
1,1-Dichloropropene	10.9	0.50	µg/L	10.0		109	70-130	1.55	20	
cis-1,3-Dichloropropene	10.9	0.40	µg/L	10.0		109	70-130	6.64	20	
trans-1,3-Dichloropropene	12.2	0.40	µg/L	10.0		122	70-130	12.3	20	
Diethyl Ether	10.2	2.0	µg/L	10.0		102	70-130	3.66	20	
Diisopropyl Ether (DIPE)	12.4	0.50	µg/L	10.0		124	70-130	1.52	20	
1,4-Dioxane	99.8	50	µg/L	100		99.8	40-160	6.40	20	V-16 †
Ethylbenzene	10.5	1.0	µg/L	10.0		105	70-130	1.70	20	
Hexachlorobutadiene	10.5	0.50	µg/L	10.0		105	70-130	4.86	20	
2-Hexanone (MBK)	126	10	µg/L	100		126	40-160	1.10	20	†
Isopropylbenzene (Cumene)	11.1	1.0	µg/L	10.0		111	70-130	0.271	20	
p-Isopropyltoluene (p-Cymene)	11.0	1.0	µg/L	10.0		110	70-130	3.38	20	
Methyl tert-Butyl Ether (MTBE)	12.0	1.0	µg/L	10.0		120	70-130	19.8	20	
Methylene Chloride	11.4	5.0	µg/L	10.0		114	70-130	0.264	20	
4-Methyl-2-pentanone (MIBK)	94.8	10	µg/L	100		94.8	40-160	0.678	20	†
Naphthalene	5.92	2.0	µg/L	10.0		59.2	* 70-130	3.26	20	L-04, V-05

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071701 - SW-846 5030B										
LCS Dup (B071701-BSD1)				Prepared & Analyzed: 04/24/13						
n-Propylbenzene	11.5	1.0	µg/L	10.0		115	70-130	0.866	20	
Styrene	10.8	1.0	µg/L	10.0		108	70-130	0.651	20	
1,1,1,2-Tetrachloroethane	10.3	1.0	µg/L	10.0		103	70-130	3.99	20	
1,1,2,2-Tetrachloroethane	8.88	0.50	µg/L	10.0		88.8	70-130	3.20	20	
Tetrachloroethylene	10.8	1.0	µg/L	10.0		108	70-130	2.64	20	
Tetrahydrofuran	10.3	2.0	µg/L	10.0		103	70-130	0.0967	20	
Toluene	11.1	1.0	µg/L	10.0		111	70-130	1.92	20	
1,2,3-Trichlorobenzene	6.00	2.0	µg/L	10.0		60.0	* 70-130	1.85	20	L-04, V-05
1,2,4-Trichlorobenzene	8.26	1.0	µg/L	10.0		82.6	70-130	1.20	20	
1,1,1-Trichloroethane	11.0	1.0	µg/L	10.0		110	70-130	2.57	20	
1,1,2-Trichloroethane	10.0	1.0	µg/L	10.0		100	70-130	0.00	20	
Trichloroethylene	10.6	1.0	µg/L	10.0		106	70-130	1.52	20	
Trichlorofluoromethane (Freon 11)	10.0	2.0	µg/L	10.0		100	70-130	0.900	20	
1,2,3-Trichloropropane	8.62	2.0	µg/L	10.0		86.2	70-130	1.73	20	
1,2,4-Trimethylbenzene	10.7	1.0	µg/L	10.0		107	70-130	3.03	20	
1,3,5-Trimethylbenzene	10.3	1.0	µg/L	10.0		103	70-130	1.06	20	
Vinyl Chloride	9.26	2.0	µg/L	10.0		92.6	70-130	7.27	20	
m+p Xylene	22.4	2.0	µg/L	20.0		112	70-130	1.55	20	
o-Xylene	10.9	1.0	µg/L	10.0		109	70-130	1.55	20	
Surrogate: 1,2-Dichloroethane-d4	24.0		µg/L	25.0		96.1	70-130			
Surrogate: Toluene-d8	25.9		µg/L	25.0		104	70-130			
Surrogate: 4-Bromofluorobenzene	25.0		µg/L	25.0		99.9	70-130			
Batch B071755 - SW-846 5030B										
Blank (B071755-BLK1)				Prepared: 04/25/13 Analyzed: 04/26/13						
Acetone	ND	10	µg/L							R-05
tert-Amyl Methyl Ether (TAME)	ND	5.0	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	1.0	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							R-05
2-Butanone (MEK)	ND	10	µg/L							R-05
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	5.0	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	1.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							R-05
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.0	µg/L							R-05, V-05
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071755 - SW-846 5030B										
Blank (B071755-BLK1)										
Prepared: 04/25/13 Analyzed: 04/26/13										
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	0.50	µg/L							
cis-1,3-Dichloropropene	ND	0.40	µg/L							
trans-1,3-Dichloropropene	ND	0.40	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							V-16
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.50	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Naphthalene	ND	2.0	µg/L							R-05, V-05
n-Propylbenzene	ND	1.0	µg/L							
Styrene	ND	1.0	µg/L							
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Tetrahydrofuran	ND	2.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	2.0	µg/L							R-05, V-05
1,2,4-Trichlorobenzene	ND	1.0	µg/L							V-05
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,2,3-Trichloropropane	ND	2.0	µg/L							
1,2,4-Trimethylbenzene	ND	1.0	µg/L							
1,3,5-Trimethylbenzene	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	26.1		µg/L	25.0		104	70-130			
Surrogate: Toluene-d8	25.7		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	23.7		µg/L	25.0		94.8	70-130			

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071755 - SW-846 5030B										
LCS (B071755-BS1)										
					Prepared: 04/25/13 Analyzed: 04/26/13					
Acetone	132	10	µg/L	100		132	40-160			L-14, R-05 †
tert-Amyl Methyl Ether (TAME)	10.9	5.0	µg/L	10.0		109	70-130			
Benzene	11.6	1.0	µg/L	10.0		116	70-130			
Bromobenzene	10.6	1.0	µg/L	10.0		106	70-130			
Bromochloromethane	11.5	1.0	µg/L	10.0		115	70-130			
Bromodichloromethane	10.2	1.0	µg/L	10.0		102	70-130			
Bromoform	9.45	1.0	µg/L	10.0		94.5	70-130			
Bromomethane	6.22	2.0	µg/L	10.0		62.2	40-160			L-14, R-05, V-20 †
2-Butanone (MEK)	127	10	µg/L	100		127	40-160			R-05 †
n-Butylbenzene	10.9	1.0	µg/L	10.0		109	70-130			
sec-Butylbenzene	11.7	1.0	µg/L	10.0		117	70-130			
tert-Butylbenzene	11.6	1.0	µg/L	10.0		116	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.9	5.0	µg/L	10.0		109	70-130			
Carbon Disulfide	14.2	5.0	µg/L	10.0		142	* 70-130			L-02, V-20
Carbon Tetrachloride	10.7	1.0	µg/L	10.0		107	70-130			
Chlorobenzene	10.9	1.0	µg/L	10.0		109	70-130			
Chlorodibromomethane	10.2	0.50	µg/L	10.0		102	70-130			
Chloroethane	11.7	2.0	µg/L	10.0		117	70-130			
Chloroform	9.89	2.0	µg/L	10.0		98.9	70-130			
Chloromethane	8.52	2.0	µg/L	10.0		85.2	40-160			R-05, V-20 †
2-Chlorotoluene	11.1	1.0	µg/L	10.0		111	70-130			
4-Chlorotoluene	11.2	1.0	µg/L	10.0		112	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.27	2.0	µg/L	10.0		92.7	70-130			R-05, V-05
1,2-Dibromoethane (EDB)	10.6	0.50	µg/L	10.0		106	70-130			
Dibromomethane	10.6	1.0	µg/L	10.0		106	70-130			
1,2-Dichlorobenzene	11.3	1.0	µg/L	10.0		113	70-130			
1,3-Dichlorobenzene	11.4	1.0	µg/L	10.0		114	70-130			
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130			
Dichlorodifluoromethane (Freon 12)	7.71	2.0	µg/L	10.0		77.1	40-160			†
1,1-Dichloroethane	11.4	1.0	µg/L	10.0		114	70-130			
1,2-Dichloroethane	10.0	1.0	µg/L	10.0		100	70-130			
1,1-Dichloroethylene	11.4	1.0	µg/L	10.0		114	70-130			
cis-1,2-Dichloroethylene	11.0	1.0	µg/L	10.0		110	70-130			
trans-1,2-Dichloroethylene	12.1	1.0	µg/L	10.0		121	70-130			
1,2-Dichloropropane	11.2	1.0	µg/L	10.0		112	70-130			
1,3-Dichloropropane	10.6	0.50	µg/L	10.0		106	70-130			
2,2-Dichloropropane	10.5	1.0	µg/L	10.0		105	70-130			
1,1-Dichloropropene	11.4	0.50	µg/L	10.0		114	70-130			
cis-1,3-Dichloropropene	10.7	0.40	µg/L	10.0		107	70-130			
trans-1,3-Dichloropropene	11.7	0.40	µg/L	10.0		117	70-130			
Diethyl Ether	11.6	2.0	µg/L	10.0		116	70-130			
Diisopropyl Ether (DIPE)	13.6	0.50	µg/L	10.0		136	* 70-130			L-02
1,4-Dioxane	121	50	µg/L	100		121	40-160			V-16 †
Ethylbenzene	10.7	1.0	µg/L	10.0		107	70-130			
Hexachlorobutadiene	10.3	0.50	µg/L	10.0		103	70-130			
2-Hexanone (MBK)	118	10	µg/L	100		118	40-160			†
Isopropylbenzene (Cumene)	10.9	1.0	µg/L	10.0		109	70-130			
p-Isopropyltoluene (p-Cymene)	11.2	1.0	µg/L	10.0		112	70-130			
Methyl tert-Butyl Ether (MTBE)	11.7	1.0	µg/L	10.0		117	70-130			
Methylene Chloride	11.4	5.0	µg/L	10.0		114	70-130			
4-Methyl-2-pentanone (MIBK)	117	10	µg/L	100		117	40-160			†
Naphthalene	7.92	2.0	µg/L	10.0		79.2	70-130			R-05, V-05

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071755 - SW-846 5030B										
LCS (B071755-BS1)										
				Prepared: 04/25/13 Analyzed: 04/26/13						
n-Propylbenzene	11.2	1.0	µg/L	10.0		112	70-130			
Styrene	10.6	1.0	µg/L	10.0		106	70-130			
1,1,1,2-Tetrachloroethane	10.4	1.0	µg/L	10.0		104	70-130			
1,1,2,2-Tetrachloroethane	10.2	0.50	µg/L	10.0		102	70-130			
Tetrachloroethylene	10.8	1.0	µg/L	10.0		108	70-130			
Tetrahydrofuran	11.5	2.0	µg/L	10.0		115	70-130			
Toluene	11.0	1.0	µg/L	10.0		110	70-130			
1,2,3-Trichlorobenzene	8.09	2.0	µg/L	10.0		80.9	70-130			R-05, V-05
1,2,4-Trichlorobenzene	9.84	1.0	µg/L	10.0		98.4	70-130			V-05
1,1,1-Trichloroethane	10.9	1.0	µg/L	10.0		109	70-130			
1,1,2-Trichloroethane	10.4	1.0	µg/L	10.0		104	70-130			
Trichloroethylene	10.6	1.0	µg/L	10.0		106	70-130			
Trichlorofluoromethane (Freon 11)	10.2	2.0	µg/L	10.0		102	70-130			
1,2,3-Trichloropropane	10.2	2.0	µg/L	10.0		102	70-130			
1,2,4-Trimethylbenzene	10.8	1.0	µg/L	10.0		108	70-130			
1,3,5-Trimethylbenzene	10.2	1.0	µg/L	10.0		102	70-130			
Vinyl Chloride	9.40	2.0	µg/L	10.0		94.0	70-130			
m+p Xylene	21.6	2.0	µg/L	20.0		108	70-130			
o-Xylene	11.2	1.0	µg/L	10.0		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	25.5		µg/L	25.0		102	70-130			
Surrogate: Toluene-d8	25.8		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0		98.1	70-130			
LCS Dup (B071755-BS1)										
				Prepared: 04/25/13 Analyzed: 04/26/13						
Acetone	105	10	µg/L	100		105	40-160	22.2	*	20 R-05 †
tert-Amyl Methyl Ether (TAME)	11.6	5.0	µg/L	10.0		116	70-130	6.39		20
Benzene	11.5	1.0	µg/L	10.0		115	70-130	0.693		20
Bromobenzene	10.6	1.0	µg/L	10.0		106	70-130	0.378		20
Bromochloromethane	12.0	1.0	µg/L	10.0		120	70-130	3.66		20
Bromodichloromethane	10.2	1.0	µg/L	10.0		102	70-130	0.00		20
Bromoform	8.82	1.0	µg/L	10.0		88.2	70-130	6.90		20
Bromomethane	8.02	2.0	µg/L	10.0		80.2	40-160	25.3	*	20 R-05, V-20 †
2-Butanone (MEK)	102	10	µg/L	100		102	40-160	21.6	*	20 R-05 †
n-Butylbenzene	11.5	1.0	µg/L	10.0		115	70-130	5.19		20
sec-Butylbenzene	12.2	1.0	µg/L	10.0		122	70-130	4.52		20
tert-Butylbenzene	11.9	1.0	µg/L	10.0		119	70-130	2.38		20
tert-Butyl Ethyl Ether (TBEE)	12.4	5.0	µg/L	10.0		124	70-130	12.5		20
Carbon Disulfide	14.2	5.0	µg/L	10.0		142	70-130	0.281	*	20 L-02, V-20
Carbon Tetrachloride	10.9	1.0	µg/L	10.0		109	70-130	2.04		20
Chlorobenzene	11.0	1.0	µg/L	10.0		110	70-130	1.09		20
Chlorodibromomethane	10.2	0.50	µg/L	10.0		102	70-130	0.293		20
Chloroethane	12.5	2.0	µg/L	10.0		125	70-130	6.53		20
Chloroform	10.3	2.0	µg/L	10.0		103	70-130	4.45		20
Chloromethane	10.7	2.0	µg/L	10.0		107	40-160	22.9	*	20 R-05, V-20 †
2-Chlorotoluene	11.3	1.0	µg/L	10.0		113	70-130	1.69		20
4-Chlorotoluene	11.2	1.0	µg/L	10.0		112	70-130	0.178		20
1,2-Dibromo-3-chloropropane (DBCP)	7.12	2.0	µg/L	10.0		71.2	70-130	26.2	*	20 V-05, R-05
1,2-Dibromoethane (EDB)	10.2	0.50	µg/L	10.0		102	70-130	4.71		20
Dibromomethane	10.1	1.0	µg/L	10.0		101	70-130	4.93		20
1,2-Dichlorobenzene	11.3	1.0	µg/L	10.0		113	70-130	0.265		20
1,3-Dichlorobenzene	11.5	1.0	µg/L	10.0		115	70-130	0.262		20
1,4-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	4.08		20

QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071755 - SW-846 5030B										
LCS Dup (B071755-BSD1)				Prepared: 04/25/13 Analyzed: 04/26/13						
Dichlorodifluoromethane (Freon 12)	8.02	2.0	µg/L	10.0		80.2	40-160	3.94	20	†
1,1-Dichloroethane	11.6	1.0	µg/L	10.0		116	70-130	1.57	20	
1,2-Dichloroethane	9.57	1.0	µg/L	10.0		95.7	70-130	4.39	20	
1,1-Dichloroethylene	11.6	1.0	µg/L	10.0		116	70-130	1.99	20	
cis-1,2-Dichloroethylene	11.2	1.0	µg/L	10.0		112	70-130	1.35	20	
trans-1,2-Dichloroethylene	12.2	1.0	µg/L	10.0		122	70-130	0.494	20	
1,2-Dichloropropane	11.2	1.0	µg/L	10.0		112	70-130	0.0889	20	
1,3-Dichloropropane	10.3	0.50	µg/L	10.0		103	70-130	3.07	20	
2,2-Dichloropropane	11.6	1.0	µg/L	10.0		116	70-130	10.0	20	
1,1-Dichloropropene	11.4	0.50	µg/L	10.0		114	70-130	0.264	20	
cis-1,3-Dichloropropene	11.0	0.40	µg/L	10.0		110	70-130	2.77	20	
trans-1,3-Dichloropropene	11.9	0.40	µg/L	10.0		119	70-130	1.78	20	
Diethyl Ether	11.5	2.0	µg/L	10.0		115	70-130	1.39	20	
Diisopropyl Ether (DIPE)	13.8	0.50	µg/L	10.0		138	* 70-130	1.38	20	L-02
1,4-Dioxane	101	50	µg/L	100		101	40-160	18.3	20	V-16 †
Ethylbenzene	10.7	1.0	µg/L	10.0		107	70-130	0.373	20	
Hexachlorobutadiene	10.5	0.50	µg/L	10.0		105	70-130	2.31	20	
2-Hexanone (MBK)	100	10	µg/L	100		100	40-160	15.9	20	†
Isopropylbenzene (Cumene)	11.1	1.0	µg/L	10.0		111	70-130	1.45	20	
p-Isopropyltoluene (p-Cymene)	11.1	1.0	µg/L	10.0		111	70-130	1.34	20	
Methyl tert-Butyl Ether (MTBE)	12.2	1.0	µg/L	10.0		122	70-130	3.94	20	
Methylene Chloride	11.8	5.0	µg/L	10.0		118	70-130	3.28	20	
4-Methyl-2-pentanone (MIBK)	103	10	µg/L	100		103	40-160	12.7	20	†
Naphthalene	6.19	2.0	µg/L	10.0		61.9	* 70-130	24.5	* 20	L-07A, R-05, V-05
n-Propylbenzene	11.3	1.0	µg/L	10.0		113	70-130	1.25	20	
Styrene	10.7	1.0	µg/L	10.0		107	70-130	1.22	20	
1,1,1,2-Tetrachloroethane	10.0	1.0	µg/L	10.0		100	70-130	3.23	20	
1,1,2,2-Tetrachloroethane	9.20	0.50	µg/L	10.0		92.0	70-130	10.2	20	
Tetrachloroethylene	11.0	1.0	µg/L	10.0		110	70-130	2.21	20	
Tetrahydrofuran	10.2	2.0	µg/L	10.0		102	70-130	11.8	20	
Toluene	11.0	1.0	µg/L	10.0		110	70-130	0.364	20	
1,2,3-Trichlorobenzene	6.40	2.0	µg/L	10.0		64.0	* 70-130	23.3	* 20	L-07A, R-05, V-05
1,2,4-Trichlorobenzene	8.43	1.0	µg/L	10.0		84.3	70-130	15.4	20	V-05
1,1,1-Trichloroethane	11.2	1.0	µg/L	10.0		112	70-130	2.17	20	
1,1,2-Trichloroethane	10.2	1.0	µg/L	10.0		102	70-130	2.72	20	
Trichloroethylene	10.5	1.0	µg/L	10.0		105	70-130	0.758	20	
Trichlorofluoromethane (Freon 11)	10.8	2.0	µg/L	10.0		108	70-130	6.29	20	
1,2,3-Trichloropropane	9.09	2.0	µg/L	10.0		90.9	70-130	11.4	20	
1,2,4-Trimethylbenzene	11.0	1.0	µg/L	10.0		110	70-130	2.39	20	
1,3,5-Trimethylbenzene	10.3	1.0	µg/L	10.0		103	70-130	0.685	20	
Vinyl Chloride	10.1	2.0	µg/L	10.0		101	70-130	7.57	20	
m+p Xylene	22.2	2.0	µg/L	20.0		111	70-130	2.65	20	
o-Xylene	11.4	1.0	µg/L	10.0		114	70-130	1.24	20	
Surrogate: 1,2-Dichloroethane-d4	25.0		µg/L	25.0		100	70-130			
Surrogate: Toluene-d8	25.6		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	24.5		µg/L	25.0		98.1	70-130			

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B071775 - SW-846 3510C

Blank (B071775-BLK1)

Prepared: 04/25/13 Analyzed: 04/30/13

C9-C18 Aliphatics	ND	100	µg/L							
C19-C36 Aliphatics	ND	100	µg/L							
Unadjusted C11-C22 Aromatics	ND	100	µg/L							
C11-C22 Aromatics	ND	100	µg/L							
Acenaphthene	ND	2.0	µg/L							
Acenaphthylene	ND	2.0	µg/L							
Anthracene	ND	2.0	µg/L							
Benzo(a)anthracene	ND	2.0	µg/L							
Benzo(a)pyrene	ND	2.0	µg/L							
Benzo(b)fluoranthene	ND	2.0	µg/L							
Benzo(g,h,i)perylene	ND	2.0	µg/L							
Benzo(k)fluoranthene	ND	2.0	µg/L							
Chrysene	ND	2.0	µg/L							
Dibenz(a,h)anthracene	ND	2.0	µg/L							
Fluoranthene	ND	2.0	µg/L							
Fluorene	ND	2.0	µg/L							
Indeno(1,2,3-cd)pyrene	ND	2.0	µg/L							
2-Methylnaphthalene	ND	2.0	µg/L							
Naphthalene	ND	2.0	µg/L							
Phenanthrene	ND	2.0	µg/L							
Pyrene	ND	2.0	µg/L							
Surrogate: Chlorooctadecane (COD)	74.7		µg/L	99.8		74.8	40-140			
Surrogate: o-Terphenyl (OTP)	74.6		µg/L	100		74.6	40-140			
Surrogate: 2-Bromonaphthalene	90.1		µg/L	100		90.1	40-140			
Surrogate: 2-Fluorobiphenyl	91.3		µg/L	100		91.3	40-140			

LCS (B071775-BS1)

Prepared: 04/25/13 Analyzed: 04/30/13

Acenaphthene	77.2	2.0	µg/L	100		77.2	40-140			
Acenaphthylene	74.3	2.0	µg/L	100		74.3	40-140			
Anthracene	79.9	2.0	µg/L	100		79.9	40-140			
Benzo(a)anthracene	80.9	2.0	µg/L	100		80.9	40-140			
Benzo(a)pyrene	78.7	2.0	µg/L	100		78.7	40-140			
Benzo(b)fluoranthene	81.7	2.0	µg/L	100		81.7	40-140			
Benzo(g,h,i)perylene	85.4	2.0	µg/L	100		85.4	40-140			
Benzo(k)fluoranthene	80.3	2.0	µg/L	100		80.3	40-140			
Chrysene	76.2	2.0	µg/L	100		76.2	40-140			
Dibenz(a,h)anthracene	84.9	2.0	µg/L	100		84.9	40-140			
Fluoranthene	79.8	2.0	µg/L	100		79.8	40-140			
Fluorene	79.6	2.0	µg/L	100		79.6	40-140			
Indeno(1,2,3-cd)pyrene	86.6	2.0	µg/L	100		86.6	40-140			
2-Methylnaphthalene	73.1	2.0	µg/L	100		73.1	40-140			
Naphthalene	64.1	2.0	µg/L	100		64.1	40-140			
Phenanthrene	80.6	2.0	µg/L	100		80.6	40-140			
Pyrene	77.7	2.0	µg/L	100		77.7	40-140			
n-Decane	52.5	2.0	µg/L	100		52.5	40-140			
n-Docosane	84.8	2.0	µg/L	100		84.8	40-140			
n-Dodecane	69.5	2.0	µg/L	100		69.5	40-140			
n-Eicosane	84.6	2.0	µg/L	100		84.6	40-140			
n-Hexacosane	80.9	2.0	µg/L	100		80.9	40-140			
n-Hexadecane	86.6	2.0	µg/L	100		86.6	40-140			
n-Hexatriacontane	86.9	2.0	µg/L	100		86.9	40-140			
n-Nonadecane	85.5	2.0	µg/L	100		85.5	40-140			

QUALITY CONTROL
Petroleum Hydrocarbons Analyses - EPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071775 - SW-846 3510C										
LCS (B071775-BS1)										
				Prepared: 04/25/13 Analyzed: 04/30/13						
n-Nonane	39.1	2.0	µg/L	100		39.1	30-140			
n-Octacosane	79.4	2.0	µg/L	100		79.4	40-140			
n-Octadecane	86.1	2.0	µg/L	100		86.1	40-140			
n-Tetracosane	82.2	2.0	µg/L	100		82.2	40-140			
n-Tetradecane	80.8	2.0	µg/L	100		80.8	40-140			
n-Triacontane	81.2	2.0	µg/L	100		81.2	40-140			
Naphthalene-aliphatic fraction	1.46	2.0	µg/L	100		1.46	0-5			
2-Methylnaphthalene-aliphatic fraction	1.61	2.0	µg/L	100		1.61	0-5			
Surrogate: Chlorooctadecane (COD)	74.3		µg/L	99.8		74.4	40-140			
Surrogate: o-Terphenyl (OTP)	73.0		µg/L	100		73.0	40-140			
Surrogate: 2-Bromonaphthalene	89.8		µg/L	100		89.8	40-140			
Surrogate: 2-Fluorobiphenyl	95.3		µg/L	100		95.3	40-140			
LCS Dup (B071775-BS1)										
				Prepared: 04/25/13 Analyzed: 04/30/13						
Acenaphthene	78.5	2.0	µg/L	100		78.5	40-140	1.63	25	
Acenaphthylene	75.6	2.0	µg/L	100		75.6	40-140	1.66	25	
Anthracene	80.7	2.0	µg/L	100		80.7	40-140	0.952	25	
Benzo(a)anthracene	82.0	2.0	µg/L	100		82.0	40-140	1.28	25	
Benzo(a)pyrene	79.8	2.0	µg/L	100		79.8	40-140	1.38	25	
Benzo(b)fluoranthene	82.9	2.0	µg/L	100		82.9	40-140	1.41	25	
Benzo(g,h,i)perylene	86.7	2.0	µg/L	100		86.7	40-140	1.58	25	
Benzo(k)fluoranthene	81.5	2.0	µg/L	100		81.5	40-140	1.39	25	
Chrysene	77.2	2.0	µg/L	100		77.2	40-140	1.27	25	
Dibenz(a,h)anthracene	86.3	2.0	µg/L	100		86.3	40-140	1.59	25	
Fluoranthene	80.6	2.0	µg/L	100		80.6	40-140	0.943	25	
Fluorene	80.9	2.0	µg/L	100		80.9	40-140	1.55	25	
Indeno(1,2,3-cd)pyrene	87.9	2.0	µg/L	100		87.9	40-140	1.54	25	
2-Methylnaphthalene	74.6	2.0	µg/L	100		74.6	40-140	2.04	25	
Naphthalene	65.1	2.0	µg/L	100		65.1	40-140	1.49	25	
Phenanthrene	81.6	2.0	µg/L	100		81.6	40-140	1.19	25	
Pyrene	78.4	2.0	µg/L	100		78.4	40-140	0.900	25	
n-Decane	47.2	2.0	µg/L	100		47.2	40-140	10.5	25	
n-Docosane	79.6	2.0	µg/L	100		79.6	40-140	6.28	25	
n-Dodecane	64.6	2.0	µg/L	100		64.6	40-140	7.30	25	
n-Eicosane	79.5	2.0	µg/L	100		79.5	40-140	6.28	25	
n-Hexacosane	75.9	2.0	µg/L	100		75.9	40-140	6.39	25	
n-Hexadecane	81.7	2.0	µg/L	100		81.7	40-140	5.78	25	
n-Hexatriacontane	83.2	2.0	µg/L	100		83.2	40-140	4.38	25	
n-Nonadecane	80.5	2.0	µg/L	100		80.5	40-140	5.98	25	
n-Nonane	34.9	2.0	µg/L	100		34.9	30-140	11.4	25	
n-Octacosane	75.1	2.0	µg/L	100		75.1	40-140	5.54	25	
n-Octadecane	81.3	2.0	µg/L	100		81.3	40-140	5.83	25	
n-Tetracosane	77.3	2.0	µg/L	100		77.3	40-140	6.10	25	
n-Tetradecane	76.4	2.0	µg/L	100		76.4	40-140	5.65	25	
n-Triacontane	76.9	2.0	µg/L	100		76.9	40-140	5.53	25	
Naphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
2-Methylnaphthalene-aliphatic fraction	ND	2.0	µg/L	100			0-5			
Surrogate: Chlorooctadecane (COD)	68.5		µg/L	99.8		68.6	40-140			
Surrogate: o-Terphenyl (OTP)	73.0		µg/L	100		73.0	40-140			
Surrogate: 2-Bromonaphthalene	88.7		µg/L	100		88.7	40-140			
Surrogate: 2-Fluorobiphenyl	93.6		µg/L	100		93.6	40-140			

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - VPH - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071856 - MA VPH										
Blank (B071856-BLK1)										
Prepared & Analyzed: 04/26/13										
Unadjusted C5-C8 Aliphatics	ND	100	µg/L							
C5-C8 Aliphatics	ND	100	µg/L							
Unadjusted C9-C12 Aliphatics	ND	100	µg/L							
C9-C12 Aliphatics	ND	100	µg/L							
C9-C10 Aromatics	ND	100	µg/L							
Surrogate: 2,5-Dibromotoluene (FID)	37.0		µg/L	40.0		92.5	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	36.0		µg/L	40.0		90.0	70-130			
LCS (B071856-BS1)										
Prepared & Analyzed: 04/26/13										
Benzene	105	1.0	µg/L	100		105	70-130			
Butylcyclohexane	99.7	1.0	µg/L	100		99.7	70-130			
Decane	106	1.0	µg/L	100		106	70-130			
Ethylbenzene	107	1.0	µg/L	100		107	70-130			
Methyl tert-Butyl Ether (MTBE)	102	1.0	µg/L	100		102	70-130			
2-Methylpentane	103	1.0	µg/L	100		103	70-130			
Naphthalene	111	5.0	µg/L	100		111	70-130			
Nonane	104	1.0	µg/L	100		104	70-130			
Pentane	83.0	1.0	µg/L	100		83.0	70-130			
Toluene	107	1.0	µg/L	100		107	70-130			
1,2,4-Trimethylbenzene	108	1.0	µg/L	100		108	70-130			
2,2,4-Trimethylpentane	135	1.0	µg/L	100		135	* 70-130			R-05
m+p Xylene	220	2.0	µg/L	200		110	70-130			
o-Xylene	108	1.0	µg/L	100		108	70-130			
Surrogate: 2,5-Dibromotoluene (FID)	41.9		µg/L	40.0		105	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	43.6		µg/L	40.0		109	70-130			
LCS Dup (B071856-BSD1)										
Prepared & Analyzed: 04/26/13										
Benzene	101	1.0	µg/L	100		101	70-130	3.81	25	
Butylcyclohexane	92.5	1.0	µg/L	100		92.5	70-130	7.58	25	
Decane	102	1.0	µg/L	100		102	70-130	3.97	25	
Ethylbenzene	102	1.0	µg/L	100		102	70-130	4.63	25	
Methyl tert-Butyl Ether (MTBE)	97.0	1.0	µg/L	100		97.0	70-130	4.67	25	
2-Methylpentane	89.1	1.0	µg/L	100		89.1	70-130	14.5	25	
Naphthalene	97.3	5.0	µg/L	100		97.3	70-130	13.3	25	
Nonane	92.0	1.0	µg/L	100		92.0	70-130	12.5	25	
Pentane	79.9	1.0	µg/L	100		79.9	70-130	3.80	25	
Toluene	103	1.0	µg/L	100		103	70-130	3.97	25	
1,2,4-Trimethylbenzene	103	1.0	µg/L	100		103	70-130	4.94	25	
2,2,4-Trimethylpentane	87.3	1.0	µg/L	100		87.3	70-130	42.6	* 25	R-05
m+p Xylene	211	2.0	µg/L	200		105	70-130	4.22	25	
o-Xylene	104	1.0	µg/L	100		104	70-130	3.87	25	
Surrogate: 2,5-Dibromotoluene (FID)	39.7		µg/L	40.0		99.2	70-130			
Surrogate: 2,5-Dibromotoluene (PID)	39.6		µg/L	40.0		99.0	70-130			

QUALITY CONTROL
Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071685 - SW-846 7470A Prep										
Blank (B071685-BLK1)				Prepared & Analyzed: 04/24/13						
Mercury	ND	0.00010	mg/L							
LCS (B071685-BS1)				Prepared & Analyzed: 04/24/13						
Mercury	0.00188	0.00010	mg/L	0.00200		94.2	80-120			
LCS Dup (B071685-BSD1)				Prepared & Analyzed: 04/24/13						
Mercury	0.00190	0.00010	mg/L	0.00200		94.9	80-120	0.743	20	
Duplicate (B071685-DUP1)				Source: 13D0894-01			Prepared & Analyzed: 04/24/13			
Mercury	ND	0.00010	mg/L		ND			NC	20	
Matrix Spike (B071685-MS1)				Source: 13D0894-01			Prepared & Analyzed: 04/24/13			
Mercury	0.00187	0.00010	mg/L	0.00200	ND	93.6	75-125			
Batch B071725 - SW-846 3005A Dissolved										
Blank (B071725-BLK1)				Prepared: 04/24/13 Analyzed: 04/25/13						
Antimony	ND	1.0	µg/L							
Arsenic	ND	0.40	µg/L							
Barium	ND	10	µg/L							
Beryllium	ND	0.40	µg/L							
Cadmium	ND	0.50	µg/L							
Chromium	ND	1.0	µg/L							
Lead	ND	1.0	µg/L							
Nickel	ND	5.0	µg/L							
Selenium	ND	5.0	µg/L							
Silver	ND	0.50	µg/L							
Thallium	ND	0.20	µg/L							
Vanadium	ND	5.0	µg/L							
Zinc	ND	10	µg/L							
LCS (B071725-BS1)				Prepared: 04/24/13 Analyzed: 04/25/13						
Antimony	269	5.0	µg/L	250		107	80-120			
Arsenic	272	2.0	µg/L	250		109	80-120			
Barium	265	50	µg/L	250		106	80-120			
Beryllium	272	2.0	µg/L	250		109	80-120			
Cadmium	279	2.5	µg/L	250		112	80-120			
Chromium	266	5.0	µg/L	250		106	80-120			
Lead	267	5.0	µg/L	250		107	80-120			
Nickel	266	25	µg/L	250		106	80-120			
Selenium	280	25	µg/L	250		112	80-120			
Silver	283	2.5	µg/L	250		113	80-120			
Thallium	260	1.0	µg/L	250		104	80-120			
Vanadium	275	25	µg/L	250		110	80-120			
Zinc	276	50	µg/L	250		110	80-120			

QUALITY CONTROL

Metals Analyses (Dissolved) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071725 - SW-846 3005A Dissolved										
LCS Dup (B071725-BSD1)										
					Prepared: 04/24/13 Analyzed: 04/25/13					
Antimony	281	5.0	µg/L	250		112	80-120	4.40	20	
Arsenic	279	2.0	µg/L	250		112	80-120	2.81	20	
Barium	276	50	µg/L	250		111	80-120	4.05	20	
Beryllium	280	2.0	µg/L	250		112	80-120	3.06	20	
Cadmium	284	2.5	µg/L	250		114	80-120	1.79	20	
Chromium	276	5.0	µg/L	250		110	80-120	3.72	20	
Lead	280	5.0	µg/L	250		112	80-120	4.82	20	
Nickel	276	25	µg/L	250		110	80-120	3.61	20	
Selenium	287	25	µg/L	250		115	80-120	2.52	20	
Silver	293	2.5	µg/L	250		117	80-120	3.35	20	
Thallium	273	1.0	µg/L	250		109	80-120	4.85	20	
Vanadium	285	25	µg/L	250		114	80-120	3.75	20	
Zinc	291	50	µg/L	250		116	80-120	5.25	20	
Duplicate (B071725-DUP1)										
				Source: 13D0894-01		Prepared: 04/24/13 Analyzed: 04/25/13				
Antimony	ND	1.0	µg/L		ND			NC	20	
Arsenic	2.15	0.40	µg/L		1.80			17.7	20	
Barium	391	50	µg/L		376			4.10	20	
Beryllium	ND	0.40	µg/L		ND			NC	20	
Cadmium	ND	0.50	µg/L		ND			NC	20	
Chromium	ND	1.0	µg/L		ND			NC	20	
Lead	ND	1.0	µg/L		ND			NC	20	
Nickel	5.32	5.0	µg/L		5.64			5.85	20	
Selenium	ND	5.0	µg/L		ND			NC	20	
Silver	ND	0.50	µg/L		ND			NC	20	
Thallium	ND	0.20	µg/L		ND			NC	20	
Vanadium	ND	5.0	µg/L		ND			NC	20	
Zinc	ND	10	µg/L		ND			NC	20	
Matrix Spike (B071725-MS1)										
				Source: 13D0894-01		Prepared: 04/24/13 Analyzed: 04/25/13				
Antimony	271	10	µg/L	250	ND	109	75-125			
Arsenic	262	4.0	µg/L	250	1.80	104	75-125			
Barium	614	100	µg/L	250	376	95.6	75-125			
Beryllium	253	4.0	µg/L	250	0.0965	101	75-125			
Cadmium	260	5.0	µg/L	250	ND	104	75-125			
Chromium	257	10	µg/L	250	0.779	102	75-125			
Lead	264	10	µg/L	250	ND	106	75-125			
Nickel	256	50	µg/L	250	5.64	100	75-125			
Selenium	256	50	µg/L	250	2.70	101	75-125			
Silver	257	5.0	µg/L	250	ND	103	75-125			
Thallium	261	2.0	µg/L	250	ND	105	75-125			
Vanadium	276	50	µg/L	250	ND	110	75-125			
Zinc	251	100	µg/L	250	2.79	99.3	75-125			

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B071672 - SW-846 7196A										
Blank (B071672-BLK1)				Prepared & Analyzed: 04/24/13						
Hexavalent Chromium	ND	0.0040	mg/L							
LCS (B071672-BS1)				Prepared & Analyzed: 04/24/13						
Hexavalent Chromium	0.10	0.0040	mg/L	0.100		103	80-120			
LCS Dup (B071672-BSD1)				Prepared & Analyzed: 04/24/13						
Hexavalent Chromium	0.11	0.0040	mg/L	0.100		108	80-120	4.81	20	
Matrix Spike (B071672-MS1)				Prepared & Analyzed: 04/24/13						
Hexavalent Chromium	0.078	0.0040	mg/L	0.100	ND	77.9	75-125			
Matrix Spike Dup (B071672-MSD1)				Prepared & Analyzed: 04/24/13						
Hexavalent Chromium	0.080	0.0040	mg/L	0.100	ND	79.6	75-125	2.16	20	

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-06	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the high side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
L-07A	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD outside of control limits. Reduced precision anticipated for any reported result for this compound.
L-14	Compound classified by MA CAM as difficult with acceptable recoveries of 40-160%. Recovery does not meet 70-130% criteria but does meet difficult compound criteria.
Q-01	Potential false positive result due to a non-petroleum hydrocarbon peak or peaks within the aliphatic/aromatic range.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
RL-07	Elevated reporting limit based on lowest point in calibration. MA CAM reporting limit not met.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
Z-01	Sample required a dilution due to low internal standard recovery of the lesser diluted digestion, reporting limit is elevated.

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
MADEP-EPH-04-1.1 in Water	
C9-C18 Aliphatics	CT,NC,WA,ME,NH-P
C19-C36 Aliphatics	CT,NC,WA,ME,NH-P
Unadjusted C11-C22 Aromatics	CT,NC,WA,ME,NH-P
C11-C22 Aromatics	CT,NC,WA,ME,NH-P
Acenaphthene	CT,NC,WA,ME,NH-P
Acenaphthylene	CT,NC,WA,ME,NH-P
Anthracene	CT,NC,WA,ME,NH-P
Benzo(a)anthracene	CT,NC,WA,ME,NH-P
Benzo(a)pyrene	CT,NC,WA,ME,NH-P
Benzo(b)fluoranthene	CT,NC,WA,ME,NH-P
Benzo(g,h,i)perylene	CT,NC,WA,ME,NH-P
Benzo(k)fluoranthene	CT,NC,WA,ME,NH-P
Chrysene	CT,NC,WA,ME,NH-P
Dibenz(a,h)anthracene	CT,NC,WA,ME,NH-P
Fluoranthene	CT,NC,WA,ME,NH-P
Fluorene	CT,NC,WA,ME
Indeno(1,2,3-cd)pyrene	CT,NC,WA,ME,NH-P
2-Methylnaphthalene	CT,NC,WA,ME
Naphthalene	CT,NC,WA,ME,NH-P
Phenanthrene	CT,NC,WA,ME,NH-P
Pyrene	CT,NC,WA,ME,NH-P
MADEP-VPH-04-1.1 in Water	
Unadjusted C5-C8 Aliphatics	CT,NC,WA,ME,NH-P
C5-C8 Aliphatics	CT,NC,WA,ME,NH-P
Unadjusted C9-C12 Aliphatics	CT,NC,WA,ME,NH-P
C9-C12 Aliphatics	CT,NC,WA,ME,NH-P
C9-C10 Aromatics	CT,NC,WA,ME,NH-P
Benzene	CT,NC,WA,ME,NH-P
Ethylbenzene	CT,NC,WA,ME,NH-P
Methyl tert-Butyl Ether (MTBE)	CT,NC,WA,ME,NH-P
Naphthalene	CT,NC,WA,ME,NH-P
Toluene	CT,NC,WA,ME,NH-P
m+p Xylene	CT,NC,WA,ME,NH-P
o-Xylene	CT,NC,WA,ME,NH-P
SW-846 6020A in Water	
Antimony	CT,NH,NY,NC,ME,VA
Arsenic	CT,NH,NY,NC,ME,VA
Barium	MA,NY,CT,NC,NH,ME,VA
Beryllium	CT,NH,NY,NC,ME,VA
Cadmium	CT,NH,NY,NC,ME,VA
Chromium	CT,NH,NY,NC,ME,VA
Lead	CT,NH,NY,NC,ME,VA
Nickel	CT,NH,NY,NC,ME,VA
Selenium	CT,NH,NY,NC,ME,VA
Silver	CT,NC,NH,NY,ME,VA
Thallium	CT,NH,NY,NC,ME,VA

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 6020A in Water</i>	
Vanadium	CT,NH,NY,NC,ME,VA
Zinc	CT,NH,NY,NC,ME,VA
<i>SW-846 7196A in Soil</i>	
Hexavalent Chromium	NY,CT,NH,NC,ME,VA
<i>SW-846 7196A in Water</i>	
Hexavalent Chromium	CT,NH,NY,NC,ME,VA
<i>SW-846 7470A in Water</i>	
Mercury	CT,NH,NY,NC,ME,VA
<i>SW-846 8260C in Water</i>	
Acetone	CT,NH,NY,ME
tert-Amyl Methyl Ether (TAME)	NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	ME
Bromochloromethane	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	NY,ME
sec-Butylbenzene	NY,ME
tert-Butylbenzene	NY,ME
tert-Butyl Ethyl Ether (TBEE)	NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME
2-Chlorotoluene	NY,ME
4-Chlorotoluene	NY,ME
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NH,NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Water</i>	
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
Diisopropyl Ether (DIPE)	NH,NY,ME
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	CT,NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	NY,ME
p-Isopropyltoluene (p-Cymene)	CT,NH,NY,ME
Methyl tert-Butyl Ether (MTBE)	CT,NH,NY,ME
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,ME
Naphthalene	NH,NY,ME
n-Propylbenzene	CT,NH,NY,ME
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,3-Trichlorobenzene	NH,NY,ME
1,2,4-Trichlorobenzene	CT,NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,4-Trimethylbenzene	NY,ME
1,3,5-Trimethylbenzene	NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2014
MA	Massachusetts DEP	M-MA100	06/30/2013
CT	Connecticut Department of Public Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2014
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2014
RI	Rhode Island Department of Health	LAO00112	12/30/2013
NC	North Carolina Div. of Water Quality	652	12/31/2013
NJ	New Jersey DEP	MA007 NELAP	06/30/2013
FL	Florida Department of Health	E871027 NELAP	06/30/2013
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2013
WA	State of Washington Department of Ecology	C2065	02/23/2014
ME	State of Maine	2011028	06/9/2013
VA	Commonwealth of Virginia	460217	12/14/2013
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2012



Phone: 413-525-2332

Fax: 413-525-6405

Email: info@contestlabs.com

www.contestlabs.com

CHAIN OF CUSTODY RECORD

39 Spruce Street
East longmeadow, MA 01028

Page 1 of 1

Page 53 of 55 13D0894_1 Contest_Final 05 02 13 1448

Company Name: WatermarkAddress: 175 Cabot St
Lowell, MAAttention: Olaf NestphalenProject Location: 175 Intervale St, Quincy, MASampled By: Jacquetta EverettProject Proposal Provided? (for billing purposes)
☒ yes 4/10/13 proposal dateTelephone: 978 452-9696Project # 13D0894
W13-7205

Client PO#

DATA DELIVERY (check all that apply)

☐ FAX ☒ EMAIL ☐ WEBSITE

Fax #

Email: olaf.nestphalen@watermarkFormat: env. con☐ PDF ☐ EXCEL ☐ GIS☐ OTHER☐ "Enhanced Data Package"

Con-Test Lab ID (laboratory use only)	Client Sample ID / Description	Collection		Composite	Grab	*Matrix Code	Conc Code	ANALYSIS REQUESTED											
		Beginning Date/Time	Ending Date/Time					8	12	12	4	4	←						
01	MW-4R	4/23/13	1045		α	GW	✓	2	3	3	1	1	←						
02	MW-1R		0935		α			2	3	3	1	1	←						
03	MW-3R		1135		α			2	3	3	1	1	←						
04	MW-3R(DUP)		1135		α			2	3	3	1	1	←						
05	TEP Blank																		
Don't analyze per Olaf W. PO# per Olaf W. (MCP) 4/24/2013																			

Comments:

Must meet Mass DEP CAMS GW-2

Please use the following codes to let Con-Test know if a specific sample may be high in concentration in Matrix/Conc. Code Box.

H - High; M - Medium; L - Low; C - Clean; U - Unknown

of Containers
** Preservation
*** Container Code
Dissolved Metals
<input checked="" type="checkbox"/> Field Filtered
<input type="checkbox"/> Lab to Filter
*** Cont. Code:
A=amber glass
G=glass
P=plastic
ST=sterile
V=vial
S=summa can
T=tetlar bag
O=Other
** Preservation
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium bisulfate
X = Na hydroxide
T = Na thiosulfate
O = Other
* Matrix Code:
GW= groundwater
WW= wastewater
DW= drinking water
A = air
S = soil/solid
SL= sludge
O = other

Relinquished by: (signature)	Date/Time	Turnaround [†]
<u>[Signature]</u>	<u>4/23/13</u>	<input checked="" type="checkbox"/> 7-Day
Received by: (signature)	Date/Time	<input type="checkbox"/> 10-Day
<u>[Signature]</u>	<u>4/23/13</u>	<input type="checkbox"/> Other
Relinquished by: (signature)	Date/Time	RUSH [†]
<u>[Signature]</u>	<u>4/23/13</u>	<input type="checkbox"/> 24-Hr <input type="checkbox"/> 48-Hr
Received by: (signature)	Date/Time	<input type="checkbox"/> 72-Hr <input type="checkbox"/> 4-Day
<u>[Signature]</u>	<u>4/24/13 1756</u>	<input type="checkbox"/> Require lab approval

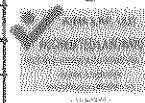
Detection Limit Requirements

Massachusetts: GW-2

Connecticut:

Other:

Is your project MCP or RCP?

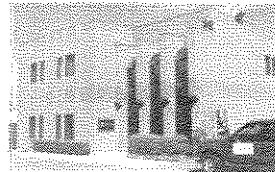
☒ MCP Form Required☐ RCP Form Required☐ MA State DW Form Required PWSID #NELAC & AIHA-LAP, LLC
Accredited

WBE/DBE Certified

[†] TURNAROUND TIME STARTS AT 9:00 A.M. THE DAY AFTER SAMPLE RECEIPT UNLESS THERE ARE QUESTIONS ON YOUR CHAIN. IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

PLEASE BE CAREFUL NOT TO CONTAMINATE THIS DOCUMENT

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com



Sample Receipt Checklist

CLIENT NAME: WATER MARK RECEIVED BY: WY DATE: 4/23/13

1) Was the chain(s) of custody relinquished and signed? Yes ☒ No ☐ No CoC Included

2) Does the chain agree with the samples?

If not, explain:

3) Are all the samples in good condition?

If not, explain:

4) How were the samples received:

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? Yes ☒ No ☐ N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 4.1

5) Are there Dissolved samples for the lab to filter?

Yes ☐ No ☒

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples?

Yes ☒ No ☐

Who was notified DAVID Date 4/24/13 Time 4/24/13

7) Location where samples are stored:

19

Permission to subcontract samples? Yes ☐ No ☐

(Walk-in clients only) if not already approved

Client Signature: _____

8) Do all samples have the proper Acid pH: Yes ☒ No ☐ N/A

9) Do all samples have the proper Base pH: Yes ☐ No ☐ N/A

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes ☐ No ☐ N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber	<u>8</u>	8 oz amber/clear jar	
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Air Cassette	
500 mL Plastic		Hg/Hopcalite Tube	
250 mL plastic	<u>8</u>	Plastic Bag / Ziploc	
40 mL Vial - type listed below	<u>30</u>	PM 2.5 / PM 10	
Colisure / bacteria bottle		PUF Cartridge	
Dissolved Oxygen bottle		SOC Kit	
Encore		TO-17 Tubes	
Flashpoint bottle		Non-ConTest Container	
Perchlorate Kit		Other glass jar	
Other		Other	

Laboratory Comments: Received 6 Trip Blanks not on CoC. (LO 4/24/13)

40 mL vials: # HCl 30 # Methanol _____

Doc# 277 # Bisulfate _____ # DI Water _____

Rev. 3 May 2012 # Thiosulfate _____ Unpreserved _____

Time and Date Frozen: _____

MADEP MCP Analytical Method Report Certification Form

Laboratory Name: Con-Test Analytical Laboratory	Project #: 13D0894
Project Location: 175 Intervale St., Quincy, MA	RTN:

This Form provides certifications for the following data set: [list Laboratory Sample ID Number(s)]

13D0894-01 thru 13D0894-04

Matrices: Water

CAM Protocol (check all that below)

8260 VOC CAM II A (X)	7470/7471 Hg CAM IIIB (X)	MassDEP VPH CAM IV A (X)	8081 Pesticides CAM V B ()	7196 Hex Cr CAM VI B (X)	MassDEP APH CAM IX A ()
8270 SVOC CAM II B ()	7010 Metals CAM III C ()	MassDEP EPH CAM IV A (X)	8151 Herbicides CAM V C ()	8330 Explosives CAM VIII A ()	TO-15 VOC CAM IX B ()
6010 Metals CAM III A ()	6020 Metals CAM III D (X)	8082 PCB CAM V A ()	9014 Total Cyanide/PAC CAM VI A ()	6860 Perchlorate CAM VIII B ()	

Affirmative response to Questions A through F is required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
E a	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
E b	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input type="checkbox"/> Yes <input type="checkbox"/> No ¹
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all No responses to Questions A through E)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹

A response to questions G, H and I below is required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
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Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹

¹ All Negative responses must be addressed in an attached Environmental Laboratory case narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: 	Position: Laboratory Manager
Printed Name: Daren J. Damboragian	Date: 05/02/13

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-46783-1

Client Project/Site: Quincy Inervale

Revision: 2

For:


Woodard & Curran Inc

95 Cedar St

Suite 100

Providence, Rhode Island 02903

Attn: Ms. Andrea Hevey



Authorized for release by:

2/3/2014 12:06:04 PM

Becky Mason, Project Manager II

(413)572-4000

becky.mason@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	MS/MSD Recovery and/or RPD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Job ID: 480-46783-1

Laboratory: TestAmerica Buffalo

Narrative

Revised report 2: Corrected MCP certification form for this report. this report replaces final report from 10/14/13.

Revised report: All soil units that were reporting as ug/Kg have been changed to mg/Kg per client request. This report replaces final report from 9/23/13.

Receipt

The samples were received on 9/28/2013 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.3° C and 2.8° C.

Except:

Both DI Water vials for the following sample were received broken: WCSB-1 (2.5-3) (480-46783-20).

The following samples were preserved via freezing on 9/28/2013 at 10:10 by the lab. The client froze all samples collected on 9/25/13 on 9/26/13 at 1530 and all samples collected on 9/26/16 at 9/26/13 at 1630 : TB-09252013 (480-46783-15), WCSB-1 (2.5-3) (480-46783-20), WCSB-1 (7-8) (480-46783-21), WCSB-11 (1-2) (480-46783-1), WCSB-2 (14-15) (480-46783-18), WCSB-3 (5-6) (480-46783-22), WCSB-4 (2.5-3) (480-46783-16), WCSB-4 (6-7) (480-46783-17), WCSB-5 (0.5-1.5) (480-46783-12), WCSB-5 (5-6) (480-46783-13), WCSB-6 (4-5) (480-46783-10), WCSB-6 (8-9) (480-46783-11), WCSB-7 (4-5) (480-46783-4), WCSB-7 (7.5-8) (480-46783-5), WCSB-8 (2-2.5) (480-46783-6), WCSB-8 (7-8) (480-46783-8), WCSB-9 (1-2) (480-46783-24) . This is within the 48 hour timeframe required by the method.

GC/MS VOA

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batches 142033 and 142036 recovered outside control limits for the following analytes: Tetrachloroethene and/or Chloromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%.

Method 8260C: The laboratory control sample duplicate (LCSD) for batch 142288 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample.

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batches 142492 and 142727 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample.

Method 8260C: The laboratory control sample (LCS) for batch 142727 exceeded control limits for the following analyte: Dichlorodifluoromethane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%.

Method 8260C: The laboratory control sample duplicate (LCSD) for batch 142564 exceeded control limits for the following analytes: Dichlorodifluoromethane and 1,4-Dioxane. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%.

Method 8260C: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: WCSB-5 (0.5-1.5) (480-46783-12), WCSB-5 (5-6) (480-46783-13), WCSB-5 (0.5-1.5) (480-46783-12), WCSB-5 (5-6) (480-46783-13), WCSB-8 (2-2.5) (480-46783-6). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample was analyzed medium level due to the nature of the sample matrix: WCSB-4 (2.5-3) (480-46783-16). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample(s) was analyzed medium level to bring the concentration of target analytes within the calibration range: WCSB-8 (2-2.5) (480-46783-6). Elevated reporting limits (RLs) are provided.

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Job ID: 480-46783-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method 8260C: The low level soil vials were cracked during freezing. The medium level vial was not damaged and was analyzed. Elevated reporting limits are provided for the following sample: WCSB-2 (14-15) (480-46783-18).

With the exception of diluted samples and adjustments made for % solids or insufficient sample mass, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-Dibromo-3-Chloropropane, Naphthalene, & Tetrahydrofuran.

No other analytical or quality issues were noted.

GC VOA

Method MAVPH: The following sample was diluted to bring the concentration of target analytes within the calibration range: WCSB-8 (2-2.5) (480-46783-6), WCSB-5 (5-6) (480-46783-13), WCSB-4 (2.5-3) (480-46783-16). Elevated reporting limits (RLs) are provided.

At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

No other analytical or quality issues were noted.

GC Semi VOA

Method 8082: Decachlorobiphenyl surrogate recovery for the following sample was outside the upper control limit: WCSB-1 (7-8) (480-46783-21) on the confirmation column. This sample did not contain any target analytes above the reporting limit (RL); therefore, re-extraction and/or re-analysis was not performed.

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: WCSB-1 (7-8) (480-46783-21), WCSB-3 (7-8) (480-46783-23), WCSB-4 (2.5-3) (480-46783-16), WCSB-4 (6-7) (480-46783-17), WCSB-8 (7-8) (480-46783-8), WCSB-9 (2.5-3) (480-46783-25), WCSB-909 (2.5-3) (480-46783-26), WCSB-7 (2.5-3) (480-46783-3), WCSB-8 (2.5-3) (480-46783-7), WCSB-6 (2.5-3) (480-46783-9). Lot # S65830

Method 8082: Surrogate recovery for the following sample was outside control limits on the confirmation column: WCSB-7 (2.5-3) (480-46783-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8082: The tetrachloromxylene surrogate recovery for the following samples was outside acceptance limits (high biased) on the primary column: (MB 240-103651/23-A). The recovery is within acceptance limits on the other column, indicating that the extraction process was in control. Data is reported.

Method 8082: The decachlorobiphenyl surrogate recovery for the following samples was outside acceptance limits (high biased) on the primary : (LCS 240-103651/24-A). The recovery is within acceptance limits on the other column, indicating that the extraction process was in control. Data is reported.

Method 8082: The closing continuing calibration verification (CCV) on the confirmation column for analytical batch 104246 recovered outside control limits. These samples were analyzed in an identical bracket with the closing CCV (confirmation column) exceeding criteria demonstrating probably matrix effect for the associated samples. The data has been reported.

Method 8082: The following sample appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: WCSB-11 (2.5-3) (480-46783-2). The sample has been quantified and reported as Aroclors 1254 and 1260. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

Method MA-EPH: Surrogate recovery 1-Chlorooctadecane for the following samples is outside control limits due to matrix interferences: WCSB-5 (0.5-1.5) (480-46783-12).

Method MA-EPH: The following sample was diluted due to abundance of target analytes OR abundance of non-target analytes: WCSB-11 (1-2) (480-46783-1). Therefore, surrogate recoveries are not representative, and elevated reporting limits (RLs) are provided.

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Job ID: 480-46783-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method MA-EPH: At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

Per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol; however they do achieve method 1 S1 standards.

No other analytical or quality issues were noted.

Metals

Method 6010: The CRI (CRI 480-142236/7) exhibited results outside the project established control limits for total cadmium and selenium. However, the results were within TestAmerica's standard quality control limits, therefore no corrective action was necessary.

Method 6010: The ICSA (ICSA 480-142236/8) exhibited results outside the project established control limits for total antimony. However, the results were within TestAmerica's standard quality control limits, therefore no corrective action was necessary.

Method 6010: The Method Blank for batch 480-141839 contained total zinc above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples WCSB-1 (2.5-3) (480-46783-20), WCSB-10 (2.5-3) (480-46783-27), WCSB-11 (2.5-3) (480-46783-2), WCSB-4 (2.5-3) (480-46783-16), WCSB-5 (2.5-3) (480-46783-14), WCSB-6 (2.5-3) (480-46783-9), WCSB-7 (2.5-3) (480-46783-3), WCSB-8 (2.5-3) (480-46783-7), WCSB-9 (2.5-3) (480-46783-25) was not performed.

Method 6010: The Serial Dilution (480-46783-20 SD) in batch 480-141839, exhibited results outside the quality control limits for total barium, chromium, vanadium, and zinc. However, the Post Digestion Spike was compliant so no corrective action was necessary.

Method 6010: The Matrix Spike/ Matrix Spike Duplicate (WCSB-1 (2.5-3) MS (480-46783-20 MS), WCSB-1 (2.5-3) MSD (480-46783-20 MSD)) recoveries for total zinc in batch 480-141839 were outside control limits. The Matrix Spike recovery for total antimony and the Matrix Spike Duplicate recovery for total lead were also outside control limits. Matrix interference is suspected. The associated Laboratory Control Sample (LCS) recovery met acceptance criteria, therefore no corrective action was necessary.

Method 6010: The following sample was diluted to bring the concentration of target analyte total zinc within the linear range of the instrument: WCSB-7 (2.5-3) (480-46783-3). Elevated reporting limits (RLs) are provided.

Method 7471A: The following samples were diluted to bring the concentration of the target analyte total mercury within the calibration range: WCSB-11 (2.5-3) (480-46783-2), WCSB-7 (2.5-3) (480-46783-3). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

MassDEP Analytical Protocol Certification Form					
Laboratory Name: TestAmerica Buffalo		Project #: 480-46783-1			
Project Location: Quincy		RTN:			
This form provides certifications for the data set for the following Laboratory Sample ID Number(s): 480-46783-1[1-27]					
Matrices: <input type="checkbox"/> Groundwater/Surface Water <input checked="" type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
CAM Protocols (check all that apply below):					
8260 VOC CAM II A <input checked="" type="checkbox"/>	7470/7471 Hg CAM III B <input checked="" type="checkbox"/>	Mass DEP VPH CAM IV A <input checked="" type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input checked="" type="checkbox"/>	Mass DEP EPH CAM IV B <input checked="" type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input checked="" type="checkbox"/>	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Responses to Questions G, H and I below are required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
<i>Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350</i>					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
¹ All negative responses must be addressed in an attached laboratory narrative.					
<i>I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.</i>					
Signature:		Position: Project Manager			
Printed Name: Becky Mason		Date: 2/3/14 11:58			
This form has been electronically signed and approved					

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-11 (1-2)

Lab Sample ID: 480-46783-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
4-Methyl-2-pentanone (MIBK)	0.00696	J	0.0351	0.00230	mg/Kg	1	☆	8260C	Total/NA	
Acetone	0.0138	J	0.351	0.00590	mg/Kg	1	☆	8260C	Total/NA	
Benzene	0.00210	J	0.00351	0.000344	mg/Kg	1	☆	8260C	Total/NA	
Ethylbenzene	0.00838		0.00351	0.000484	mg/Kg	1	☆	8260C	Total/NA	
m-Xylene & p-Xylene	0.0169		0.00701	0.00118	mg/Kg	1	☆	8260C	Total/NA	
o-Xylene	0.00689		0.00351	0.000916	mg/Kg	1	☆	8260C	Total/NA	
Styrene	0.00364		0.00351	0.000351	mg/Kg	1	☆	8260C	Total/NA	
Tetrachloroethene	0.257		0.00351	0.000941	mg/Kg	1	☆	8260C	Total/NA	
Toluene	0.00399		0.00351	0.000530	mg/Kg	1	☆	8260C	Total/NA	
Trichloroethene	0.00658		0.00351	0.00154	mg/Kg	1	☆	8260C	Total/NA	
C5-C8 Aliphatics (adjusted)	0.665		0.256	0.0102	mg/Kg	1	☆	MA VPH	Total/NA	
C5-C8 Aliphatics (unadjusted)	0.676	B	0.255	0.0102	mg/Kg	1	☆	MAVPH	Total/NA	
C9-C10 Aromatics	0.273		0.255	0.0102	mg/Kg	1	☆	MAVPH	Total/NA	
C9-C12 Aliphatics (unadjusted)	0.538	B	0.255	0.0102	mg/Kg	1	☆	MAVPH	Total/NA	
C11-C22 Aromatics (unadjusted)	1660		49.1	19.6	mg/Kg	10	☆	MA-EPH	Total/NA	
C19-C36 Aliphatics	242		49.1	19.6	mg/Kg	10	☆	MA-EPH	Total/NA	
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	1120		51.2	51.2	mg/Kg	10	☆	MA-EPH	Total/NA	

Client Sample ID: WCSB-11 (2.5-3)

Lab Sample ID: 480-46783-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1254	0.630		0.347	0.179	mg/Kg	10		☼	8082	Total/NA
Silver	0.442	J	0.500	0.200	mg/Kg	1		☼	6010	Total/NA
Arsenic	4.99		1.00	0.400	mg/Kg	1		☼	6010	Total/NA
Barium	87.7		0.500	0.110	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.662		0.200	0.0280	mg/Kg	1		☼	6010	Total/NA
Cadmium	26.3	^	0.200	0.0300	mg/Kg	1		☼	6010	Total/NA
Chromium	24.5		0.500	0.200	mg/Kg	1		☼	6010	Total/NA
Nickel	34.1		1.00	0.230	mg/Kg	1		☼	6010	Total/NA
Vanadium	20.2		0.500	0.110	mg/Kg	1		☼	6010	Total/NA
Zinc	541	B	2.50	0.153	mg/Kg	1		☼	6010	Total/NA
Lead	460		0.500	0.240	mg/Kg	1		☼	6010	Total/NA
Selenium	0.761	^	0.500	0.400	mg/Kg	1		☼	6010	Total/NA
Antimony	1.50	^	0.500	0.400	mg/Kg	1		☼	6010	Total/NA
Mercury	1.24		0.514	0.0417	mg/Kg	5		☼	7471A	Total/NA

Client Sample ID: WCSB-7 (2.5-3)

Lab Sample ID: 480-46783-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1260	0.0381		0.0368	0.0189	mg/Kg	1		☼	8082	Total/NA
Silver	5.28		0.501	0.201	mg/Kg	1		☼	6010	Total/NA
Arsenic	8.00		1.00	0.401	mg/Kg	1		☼	6010	Total/NA
Barium	230		0.501	0.110	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.442		0.201	0.0281	mg/Kg	1		☼	6010	Total/NA
Cadmium	6.93	^	0.201	0.0301	mg/Kg	1		☼	6010	Total/NA
Chromium	518		0.501	0.201	mg/Kg	1		☼	6010	Total/NA
Nickel	62.6		1.00	0.231	mg/Kg	1		☼	6010	Total/NA
Thallium	0.831	J	1.00	0.301	mg/Kg	1		☼	6010	Total/NA
Vanadium	213		0.501	0.110	mg/Kg	1		☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-7 (2.5-3) (Continued)

Lab Sample ID: 480-46783-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	5720	B	12.5	0.767	mg/Kg	5	☼	6010	Total/NA
Lead	895		0.501	0.241	mg/Kg	1	☼	6010	Total/NA
Selenium	4.06	^	0.501	0.401	mg/Kg	1	☼	6010	Total/NA
Antimony	3.49	^	0.501	0.401	mg/Kg	1	☼	6010	Total/NA
Mercury	2.94		1.06	0.0860	mg/Kg	10	☼	7471A	Total/NA

Client Sample ID: WCSB-7 (4-5)

Lab Sample ID: 480-46783-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.00914	J	0.256	0.00431	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.0102		0.00256	0.000687	mg/Kg	1	☼	8260C	Total/NA
C5-C8 Aliphatics (adjusted)	0.0523	J	0.283	0.0113	mg/Kg	1	☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.0463	J B	0.213	0.00852	mg/Kg	1	☼	MAVPH	Total/NA
C9-C10 Aromatics	0.0362	J	0.213	0.00852	mg/Kg	1	☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.0380	J	0.213	0.00852	mg/Kg	1	☼	MAVPH	Total/NA
C19-C36 Aliphatics	4.91	J	5.34	2.14	mg/Kg	1	☼	MA-EPH	Total/NA
C9-C18 Aliphatics	2.42	J B	5.34	2.14	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSB-7 (7.5-8)

Lab Sample ID: 480-46783-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0750	J	0.418	0.00704	mg/Kg	1	☼	8260C	Total/NA
Carbon disulfide	0.00834		0.00418	0.00418	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: WCSB-8 (2-2.5)

Lab Sample ID: 480-46783-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.0519	J	0.0777	0.0298	mg/Kg	1	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	0.0197	J	0.0777	0.0100	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.0275	J	0.155	0.0261	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.0216	J	0.0777	0.0203	mg/Kg	1	☼	8260C	Total/NA
Styrene	0.0149	J	0.0777	0.00777	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.198		0.0777	0.0208	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.0152	J	0.0777	0.0117	mg/Kg	1	☼	8260C	Total/NA
Naphthalene - DL	11.2		6.21	0.167	mg/Kg	8	☼	8260C	Total/NA
C5-C8 Aliphatics (adjusted)	1.31	J	14.5	0.579	mg/Kg	50	☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	1.31	J B	14.9	0.596	mg/Kg	50	☼	MAVPH	Total/NA
C9-C10 Aromatics	1.53	J	14.9	0.596	mg/Kg	50	☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	1.11	J	14.9	0.596	mg/Kg	50	☼	MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	422		5.63	2.25	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	501		5.63	2.25	mg/Kg	1	☼	MA-EPH	Total/NA
C9-C18 Aliphatics	5.01	J B	5.63	2.25	mg/Kg	1	☼	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	183		5.79	5.79	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSB-8 (2.5-3)

Lab Sample ID: 480-46783-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.126		0.0454	0.0234	mg/Kg	1	☼	8082	Total/NA
Arsenic	11.1		1.28	0.513	mg/Kg	1	☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-8 (2.5-3) (Continued)

Lab Sample ID: 480-46783-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	41.8		0.642	0.141	mg/Kg	1		✱	6010	Total/NA
Beryllium	0.499		0.257	0.0359	mg/Kg	1		✱	6010	Total/NA
Cadmium	2.73	^	0.257	0.0385	mg/Kg	1		✱	6010	Total/NA
Chromium	32.6		0.642	0.257	mg/Kg	1		✱	6010	Total/NA
Nickel	34.4		1.28	0.295	mg/Kg	1		✱	6010	Total/NA
Vanadium	14.2		0.642	0.141	mg/Kg	1		✱	6010	Total/NA
Zinc	157	B	3.21	0.196	mg/Kg	1		✱	6010	Total/NA
Lead	62.1		0.642	0.308	mg/Kg	1		✱	6010	Total/NA
Selenium	1.25	^	0.642	0.513	mg/Kg	1		✱	6010	Total/NA
Antimony	0.613	J ^	0.642	0.513	mg/Kg	1		✱	6010	Total/NA
Mercury	0.0568	J	0.137	0.0111	mg/Kg	1		✱	7471A	Total/NA

Client Sample ID: WCSB-8 (7-8)

Lab Sample ID: 480-46783-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0403		0.0307	0.00224	mg/Kg	1		✱	8260C	Total/NA
Acetone	0.167	J	0.307	0.00516	mg/Kg	1		✱	8260C	Total/NA
Benzene	0.00102	J	0.00307	0.000300	mg/Kg	1		✱	8260C	Total/NA
Carbon disulfide	0.0241		0.00307	0.00307	mg/Kg	1		✱	8260C	Total/NA
Naphthalene	0.00497	J	0.0307	0.000822	mg/Kg	1		✱	8260C	Total/NA
C5-C8 Aliphatics (adjusted)	0.451		0.363	0.0145	mg/Kg	1		✱	MA VPH	Total/NA
C9-C12 Aliphatics (adjusted)	0.733		0.363	0.0145	mg/Kg	1		✱	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.347	B	0.347	0.0139	mg/Kg	1		✱	MAVPH	Total/NA
C9-C10 Aromatics	0.291	J	0.347	0.0139	mg/Kg	1		✱	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.813	B	0.347	0.0139	mg/Kg	1		✱	MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	21.3		6.76	2.70	mg/Kg	1		✱	MA-EPH	Total/NA
C19-C36 Aliphatics	53.8		6.76	2.70	mg/Kg	1		✱	MA-EPH	Total/NA
C9-C18 Aliphatics	4.29	J B	6.76	2.70	mg/Kg	1		✱	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	18.2		7.26	7.26	mg/Kg	1		✱	MA-EPH	Total/NA

Client Sample ID: WCSB-6 (2.5-3)

Lab Sample ID: 480-46783-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1254	0.121		0.0342	0.0176	mg/Kg	1		✱	8082	Total/NA
Arsenic	2.81		0.987	0.395	mg/Kg	1		✱	6010	Total/NA
Barium	39.5		0.494	0.109	mg/Kg	1		✱	6010	Total/NA
Beryllium	0.424		0.197	0.0276	mg/Kg	1		✱	6010	Total/NA
Cadmium	1.75	^	0.197	0.0296	mg/Kg	1		✱	6010	Total/NA
Chromium	18.4		0.494	0.197	mg/Kg	1		✱	6010	Total/NA
Nickel	28.1		0.987	0.227	mg/Kg	1		✱	6010	Total/NA
Vanadium	13.0		0.494	0.109	mg/Kg	1		✱	6010	Total/NA
Zinc	645	B	2.47	0.151	mg/Kg	1		✱	6010	Total/NA
Lead	145		0.494	0.237	mg/Kg	1		✱	6010	Total/NA
Antimony	0.413	J ^	0.494	0.395	mg/Kg	1		✱	6010	Total/NA
Mercury	0.123		0.0996	0.00807	mg/Kg	1		✱	7471A	Total/NA

Client Sample ID: WCSB-6 (4-5)

Lab Sample ID: 480-46783-10

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-6 (4-5) (Continued)

Lab Sample ID: 480-46783-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0219	J	0.283	0.00477	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: WCSB-6 (8-9)

Lab Sample ID: 480-46783-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0204	J	0.0262	0.00192	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.0704	J	0.262	0.00442	mg/Kg	1	☼	8260C	Total/NA
Benzene	0.00268		0.00262	0.000257	mg/Kg	1	☼	8260C	Total/NA
Carbon disulfide	0.00563		0.00262	0.00262	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.00115	J	0.00262	0.000362	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.00326		0.00262	0.000397	mg/Kg	1	☼	8260C	Total/NA
C5-C8 Aliphatics (adjusted)	2.27		0.317	0.0127	mg/Kg	1	☼	MA VPH	Total/NA
C9-C12 Aliphatics (adjusted)	0.0351	J	0.317	0.0127	mg/Kg	1	☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	1.94	B	0.261	0.0104	mg/Kg	1	☼	MAVPH	Total/NA
C9-C10 Aromatics	0.251	J	0.261	0.0104	mg/Kg	1	☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.317	B	0.261	0.0104	mg/Kg	1	☼	MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	3.18	J	6.13	2.45	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	5.49	J	6.13	2.45	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSB-5 (0.5-1.5)

Lab Sample ID: 480-46783-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	3.23		1.28	0.156	mg/Kg	10	☼	8260C	Total/NA
1,2-Dichlorobenzene	2.06		1.28	0.200	mg/Kg	10	☼	8260C	Total/NA
1,3-Dichlorobenzene	22.7		1.28	0.132	mg/Kg	10	☼	8260C	Total/NA
1,4-Dichlorobenzene	27.5		1.28	0.358	mg/Kg	10	☼	8260C	Total/NA
Benzene	0.430	J	1.28	0.125	mg/Kg	10	☼	8260C	Total/NA
Naphthalene	5.90	J	12.8	0.343	mg/Kg	10	☼	8260C	Total/NA
Chlorobenzene - DL	95.0		6.40	1.69	mg/Kg	50	☼	8260C	Total/NA
PCB-1260	1040		362	186	mg/Kg	10000	☼	8082	Total/NA
C11-C22 Aromatics (unadjusted)	2070		5.14	2.05	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	9730		5.14	2.05	mg/Kg	1	☼	MA-EPH	Total/NA
C9-C18 Aliphatics	6890	B	5.14	2.05	mg/Kg	1	☼	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	1870		5.48	5.48	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSB-5 (5-6)

Lab Sample ID: 480-46783-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	2.45		1.37	0.167	mg/Kg	10	☼	8260C	Total/NA
1,2-Dichlorobenzene	2.10		1.37	0.214	mg/Kg	10	☼	8260C	Total/NA
1,3-Dichlorobenzene	15.8		1.37	0.141	mg/Kg	10	☼	8260C	Total/NA
1,4-Dichlorobenzene	24.2		1.37	0.384	mg/Kg	10	☼	8260C	Total/NA
Benzene	0.526	J	1.37	0.134	mg/Kg	10	☼	8260C	Total/NA
Naphthalene	1.16	J	13.7	0.367	mg/Kg	10	☼	8260C	Total/NA
Chlorobenzene - DL	105		5.48	1.45	mg/Kg	40	☼	8260C	Total/NA
C5-C8 Aliphatics (adjusted)	1.48	J	33.9	1.36	mg/Kg	100	☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	1.48	J	28.7	1.15	mg/Kg	100	☼	MAVPH	Total/NA
C9-C10 Aromatics	33.1		28.7	1.15	mg/Kg	100	☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	53.2		28.7	1.15	mg/Kg	100	☼	MAVPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-5 (5-6) (Continued)

Lab Sample ID: 480-46783-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (unadjusted)	1250		6.50	2.60	mg/Kg	1		☼	MA-EPH	Total/NA
C19-C36 Aliphatics	3230		6.50	2.60	mg/Kg	1		☼	MA-EPH	Total/NA
C9-C18 Aliphatics	2390	B	6.50	2.60	mg/Kg	1		☼	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	1150		6.78	6.78	mg/Kg	1		☼	MA-EPH	Total/NA

Client Sample ID: WCSB-5 (2.5-3)

Lab Sample ID: 480-46783-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1260	37.5		19.8	10.2	mg/Kg	500		☼	8082	Total/NA
Arsenic	5.39		1.14	0.455	mg/Kg	1		☼	6010	Total/NA
Barium	139		0.569	0.125	mg/Kg	1		☼	6010	Total/NA
Beryllium	1.43		0.227	0.0318	mg/Kg	1		☼	6010	Total/NA
Cadmium	0.603	^	0.227	0.0341	mg/Kg	1		☼	6010	Total/NA
Chromium	12.0		0.569	0.227	mg/Kg	1		☼	6010	Total/NA
Nickel	7.12		1.14	0.262	mg/Kg	1		☼	6010	Total/NA
Vanadium	12.6		0.569	0.125	mg/Kg	1		☼	6010	Total/NA
Zinc	181	B	2.84	0.174	mg/Kg	1		☼	6010	Total/NA
Lead	295		0.569	0.273	mg/Kg	1		☼	6010	Total/NA
Selenium	0.847	^	0.569	0.455	mg/Kg	1		☼	6010	Total/NA
Mercury	0.550		0.110	0.00887	mg/Kg	1		☼	7471A	Total/NA

Client Sample ID: TB-09252013

Lab Sample ID: 480-46783-15

No Detections.

Client Sample ID: WCSB-4 (2.5-3)

Lab Sample ID: 480-46783-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,2,3-Trichlorobenzene	0.0310	J	0.117	0.0249	mg/Kg	1		☼	8260C	Total/NA
1,2,4-Trichlorobenzene	0.0497	J	0.117	0.0142	mg/Kg	1		☼	8260C	Total/NA
1,2,4-Trimethylbenzene	0.0553	J	0.117	0.0450	mg/Kg	1		☼	8260C	Total/NA
Benzene	0.0468	J	0.117	0.0115	mg/Kg	1		☼	8260C	Total/NA
Ethylbenzene	0.124		0.117	0.0162	mg/Kg	1		☼	8260C	Total/NA
m-Xylene & p-Xylene	0.110	J	0.234	0.0394	mg/Kg	1		☼	8260C	Total/NA
Naphthalene	0.0757	J	1.17	0.0314	mg/Kg	1		☼	8260C	Total/NA
n-Butylbenzene	0.124		0.117	0.0204	mg/Kg	1		☼	8260C	Total/NA
N-Propylbenzene	0.136		0.117	0.0187	mg/Kg	1		☼	8260C	Total/NA
o-Xylene	0.0409	J	0.117	0.0306	mg/Kg	1		☼	8260C	Total/NA
Tetrahydrofuran	6.67		2.34	0.216	mg/Kg	1		☼	8260C	Total/NA
Toluene	0.0474	J	0.117	0.0177	mg/Kg	1		☼	8260C	Total/NA
C5-C8 Aliphatics (adjusted)	79.6		3.21	0.128	mg/Kg	10		☼	MA VPH	Total/NA
C9-C12 Aliphatics (adjusted)	50.7		3.21	0.128	mg/Kg	10		☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	82.0	B	3.09	0.124	mg/Kg	10		☼	MAVPH	Total/NA
C9-C10 Aromatics	13.6		3.09	0.124	mg/Kg	10		☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	66.3	B	3.09	0.124	mg/Kg	10		☼	MAVPH	Total/NA
PCB-1260	0.122		0.0416	0.0214	mg/Kg	1		☼	8082	Total/NA
C11-C22 Aromatics (unadjusted)	5.57	J	5.90	2.36	mg/Kg	1		☼	MA-EPH	Total/NA
C19-C36 Aliphatics	23.6		5.90	2.36	mg/Kg	1		☼	MA-EPH	Total/NA
C9-C18 Aliphatics	2.50	J B	5.90	2.36	mg/Kg	1		☼	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-4 (2.5-3) (Continued)

Lab Sample ID: 480-46783-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	74.1		1.19	0.477	mg/Kg	1	☼	6010	Total/NA
Barium	24.9		0.596	0.131	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.198	J	0.238	0.0334	mg/Kg	1	☼	6010	Total/NA
Cadmium	1.57	^	0.238	0.0358	mg/Kg	1	☼	6010	Total/NA
Chromium	98.0		0.596	0.238	mg/Kg	1	☼	6010	Total/NA
Nickel	129		1.19	0.274	mg/Kg	1	☼	6010	Total/NA
Vanadium	215		0.596	0.131	mg/Kg	1	☼	6010	Total/NA
Zinc	369	B	2.98	0.182	mg/Kg	1	☼	6010	Total/NA
Lead	274		0.596	0.286	mg/Kg	1	☼	6010	Total/NA
Selenium	3.66	^	0.596	0.477	mg/Kg	1	☼	6010	Total/NA
Antimony	3.49	^	0.596	0.477	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0760	J	0.121	0.00982	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: WCSB-4 (6-7)

Lab Sample ID: 480-46783-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0966	J	0.281	0.00474	mg/Kg	1	☼	8260C	Total/NA
Chlorobenzene	0.00449		0.00281	0.000742	mg/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.000817	J	0.00281	0.000720	mg/Kg	1	☼	8260C	Total/NA
PCB-1260	0.0282	J	0.0481	0.0248	mg/Kg	1	☼	8082	Total/NA
C11-C22 Aromatics (unadjusted)	6.68	J	7.08	2.83	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	13.6		7.08	2.83	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSB-2 (14-15)

Lab Sample ID: 480-46783-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3-Dichlorobenzene	0.0189	J	0.108	0.0111	mg/Kg	1	☼	8260C	Total/NA
Benzene	0.0120	J	0.108	0.0106	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: WCSB-1 (1-2)

Lab Sample ID: 480-46783-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.00238	J	0.00390	0.00150	mg/Kg	1	☼	8260C	Total/NA
2-Butanone (MEK)	0.0740	*	0.0390	0.00285	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.207	J	0.390	0.00656	mg/Kg	1	☼	8260C	Total/NA
Benzene	0.0463		0.00390	0.000382	mg/Kg	1	☼	8260C	Total/NA
Carbon disulfide	0.00556		0.00390	0.00390	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.0108		0.00390	0.000538	mg/Kg	1	☼	8260C	Total/NA
Isopropylbenzene	0.00173	J	0.00390	0.00117	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00955		0.00779	0.00131	mg/Kg	1	☼	8260C	Total/NA
n-Butylbenzene	0.00160	J	0.00390	0.000678	mg/Kg	1	☼	8260C	Total/NA
N-Propylbenzene	0.00411		0.00390	0.000623	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00643		0.00390	0.00102	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.00179	J	0.00390	0.00105	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.0333		0.00390	0.000589	mg/Kg	1	☼	8260C	Total/NA
C11-C22 Aromatics (unadjusted)	301		5.54	2.22	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	10.6		5.54	2.22	mg/Kg	1	☼	MA-EPH	Total/NA
C9-C18 Aliphatics	22.9	B	5.54	2.22	mg/Kg	1	☼	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	145		5.92	5.92	mg/Kg	1	☼	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-1 (2.5-3)

Lab Sample ID: 480-46783-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	5.27		4.65	2.39	mg/Kg	100	☼	8082	Total/NA
C11-C22 Aromatics (unadjusted)	3.19	J	7.03	2.81	mg/Kg	1	☼	MA-EPH	Total/NA
Arsenic	19.3		1.42	0.569	mg/Kg	1	☼	6010	Total/NA
Barium	21.5		0.711	0.156	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.577		0.284	0.0398	mg/Kg	1	☼	6010	Total/NA
Chromium	17.6		0.711	0.284	mg/Kg	1	☼	6010	Total/NA
Nickel	22.8		1.42	0.327	mg/Kg	1	☼	6010	Total/NA
Vanadium	26.9		0.711	0.156	mg/Kg	1	☼	6010	Total/NA
Zinc	82.6	B	3.55	0.218	mg/Kg	1	☼	6010	Total/NA
Lead	183		0.711	0.341	mg/Kg	1	☼	6010	Total/NA
Selenium	1.10	^	0.711	0.569	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0171	J	0.138	0.0112	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: WCSB-1 (7-8)

Lab Sample ID: 480-46783-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.0286	*	0.0273	0.00200	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.0965	J	0.273	0.00459	mg/Kg	1	☼	8260C	Total/NA
Benzene	0.00156	J	0.00273	0.000267	mg/Kg	1	☼	8260C	Total/NA
Carbon disulfide	0.00822		0.00273	0.00273	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.000546	J	0.00273	0.000376	mg/Kg	1	☼	8260C	Total/NA
Naphthalene	0.00993	J	0.0273	0.000731	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.00147	J	0.00273	0.000412	mg/Kg	1	☼	8260C	Total/NA
PCB-1260	0.0307	J	0.0443	0.0228	mg/Kg	1	☼	8082	Total/NA
C11-C22 Aromatics (unadjusted)	33.3		6.40	2.56	mg/Kg	1	☼	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	21.5		6.74	6.74	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSB-3 (5-6)

Lab Sample ID: 480-46783-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Isopropyltoluene	0.00369		0.00303	0.000486	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.00815	J	0.303	0.00510	mg/Kg	1	☼	8260C	Total/NA
Naphthalene	0.0486		0.0303	0.000812	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.00373		0.00303	0.000813	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: WCSB-3 (7-8)

Lab Sample ID: 480-46783-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C5-C8 Aliphatics (adjusted)	1.20		0.344	0.0138	mg/Kg	1	☼	MA VPH	Total/NA
Benzene	0.0616	J	0.101	0.0202	mg/Kg	1	☼	MAVPH	Total/NA
Ethylbenzene	0.0281	J	0.101	0.0202	mg/Kg	1	☼	MAVPH	Total/NA
Naphthalene	0.107	B	0.101	0.0202	mg/Kg	1	☼	MAVPH	Total/NA
Toluene	0.0306	J	0.101	0.0202	mg/Kg	1	☼	MAVPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.964	B	0.504	0.0202	mg/Kg	1	☼	MAVPH	Total/NA
C9-C10 Aromatics	1.12		0.504	0.0202	mg/Kg	1	☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.659	B	0.504	0.0202	mg/Kg	1	☼	MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	5.54	J	6.52	2.61	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	12.7		6.52	2.61	mg/Kg	1	☼	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-9 (1-2)

Lab Sample ID: 480-46783-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (unadjusted)	237		5.75	2.30	mg/Kg	1		☼	MA-EPH	Total/NA
C19-C36 Aliphatics	1940		5.75	2.30	mg/Kg	1		☼	MA-EPH	Total/NA
C9-C18 Aliphatics	180	B	5.75	2.30	mg/Kg	1		☼	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	119		5.98	5.98	mg/Kg	1		☼	MA-EPH	Total/NA

Client Sample ID: WCSB-9 (2.5-3)

Lab Sample ID: 480-46783-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1260	0.0408		0.0388	0.0200	mg/Kg	1		☼	8082	Total/NA
Arsenic	6.70		1.10	0.440	mg/Kg	1		☼	6010	Total/NA
Barium	112		0.550	0.121	mg/Kg	1		☼	6010	Total/NA
Beryllium	1.45		0.220	0.0308	mg/Kg	1		☼	6010	Total/NA
Cadmium	0.695	^	0.220	0.0330	mg/Kg	1		☼	6010	Total/NA
Chromium	13.6		0.550	0.220	mg/Kg	1		☼	6010	Total/NA
Nickel	15.1		1.10	0.253	mg/Kg	1		☼	6010	Total/NA
Vanadium	22.0		0.550	0.121	mg/Kg	1		☼	6010	Total/NA
Zinc	278	B	2.75	0.168	mg/Kg	1		☼	6010	Total/NA
Lead	218		0.550	0.264	mg/Kg	1		☼	6010	Total/NA
Selenium	1.00	^	0.550	0.440	mg/Kg	1		☼	6010	Total/NA
Mercury	0.207		0.113	0.00919	mg/Kg	1		☼	7471A	Total/NA

Client Sample ID: WCSB-909 (2.5-3)

Lab Sample ID: 480-46783-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1260	0.0555		0.0390	0.0201	mg/Kg	1		☼	8082	Total/NA

Client Sample ID: WCSB-10 (2.5-3)

Lab Sample ID: 480-46783-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	7.74		1.07	0.427	mg/Kg	1		☼	6010	Total/NA
Barium	31.6		0.534	0.117	mg/Kg	1		☼	6010	Total/NA
Beryllium	1.93		0.213	0.0299	mg/Kg	1		☼	6010	Total/NA
Cadmium	0.348	^	0.213	0.0320	mg/Kg	1		☼	6010	Total/NA
Chromium	1.52		0.534	0.213	mg/Kg	1		☼	6010	Total/NA
Nickel	3.20		1.07	0.245	mg/Kg	1		☼	6010	Total/NA
Vanadium	2.32		0.534	0.117	mg/Kg	1		☼	6010	Total/NA
Zinc	163	B	2.67	0.163	mg/Kg	1		☼	6010	Total/NA
Lead	356		0.534	0.256	mg/Kg	1		☼	6010	Total/NA
Selenium	0.706	^	0.534	0.427	mg/Kg	1		☼	6010	Total/NA
Mercury	0.0769	J	0.102	0.00828	mg/Kg	1		☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-11 (1-2)

Lab Sample ID: 480-46783-1

Date Collected: 09/25/13 09:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 97.7

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00351		0.00351	0.000701	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,1,1-Trichloroethane	<0.00351		0.00351	0.000509	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,1,2,2-Tetrachloroethane	<0.00351		0.00351	0.00114	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,1,2-Trichloroethane	<0.00351		0.00351	0.000912	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,1-Dichloroethane	<0.00351		0.00351	0.000856	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,1-Dichloroethene	<0.00351		0.00351	0.000858	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,1-Dichloropropene	<0.00351		0.00351	0.000996	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,2,3-Trichlorobenzene	<0.00351		0.00351	0.000745	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,2,3-Trichloropropane	<0.00351		0.00351	0.000714	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,2,4-Trichlorobenzene	<0.00351		0.00351	0.000426	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,2,4-Trimethylbenzene	<0.00351		0.00351	0.00135	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,2-Dibromo-3-Chloropropane	<0.0351		0.0351	0.00351	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,2-Dichlorobenzene	<0.00351		0.00351	0.000548	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,2-Dichloroethane	<0.00351		0.00351	0.000352	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,2-Dichloropropane	<0.00351		0.00351	0.00351	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,3,5-Trimethylbenzene	<0.00351		0.00351	0.000452	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,3-Dichlorobenzene	<0.00351		0.00351	0.000360	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,3-Dichloropropane	<0.00351		0.00351	0.000421	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,4-Dichlorobenzene	<0.00351		0.00351	0.000982	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
1,4-Dioxane	<0.351		0.351	0.0338	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
2,2-Dichloropropane	<0.00351		0.00351	0.00119	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
2-Butanone (MEK)	<0.0351	*	0.0351	0.00257	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
2-Chlorotoluene	<0.00351		0.00351	0.000460	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
2-Hexanone	<0.0351		0.0351	0.00351	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
4-Chlorotoluene	<0.00351		0.00351	0.000828	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
4-Isopropyltoluene	<0.00351		0.00351	0.000562	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
4-Methyl-2-pentanone (MIBK)	0.00696	J	0.0351	0.00230	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Acetone	0.0138	J	0.351	0.00590	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Benzene	0.00210	J	0.00351	0.000344	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Bromobenzene	<0.00351		0.00351	0.00123	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Bromoform	<0.00351		0.00351	0.00351	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Bromomethane	<0.00701		0.00701	0.000631	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Carbon disulfide	<0.00351		0.00351	0.00351	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Carbon tetrachloride	<0.00351		0.00351	0.000679	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Chlorobenzene	<0.00351		0.00351	0.000926	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Chlorobromomethane	<0.00351		0.00351	0.000506	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Chlorodibromomethane	<0.00351		0.00351	0.000898	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Chloroethane	<0.00701		0.00701	0.00158	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Chloroform	<0.00351		0.00351	0.000433	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Chloromethane	<0.00701		0.00701	0.000424	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
cis-1,2-Dichloroethene	<0.00351		0.00351	0.000898	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
cis-1,3-Dichloropropene	<0.00351		0.00351	0.00101	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Dichlorobromomethane	<0.00351		0.00351	0.000940	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Dichlorodifluoromethane	<0.00701		0.00701	0.000579	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Ethyl ether	<0.00351		0.00351	0.00295	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Ethylbenzene	0.00838		0.00351	0.000484	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Ethylene Dibromide	<0.00351		0.00351	0.000900	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Hexachlorobutadiene	<0.00351		0.00351	0.000822	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Isopropyl ether	<0.00351		0.00351	0.00351	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-11 (1-2)

Lab Sample ID: 480-46783-1

Date Collected: 09/25/13 09:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 97.7

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	<0.00351		0.00351	0.00106	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Methyl tert-butyl ether	<0.00351		0.00351	0.000689	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Methylene Chloride	<0.00351		0.00351	0.00323	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
m-Xylene & p-Xylene	0.0169		0.00701	0.00118	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Naphthalene	<0.0351		0.0351	0.000940	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
n-Butylbenzene	<0.00351		0.00351	0.000610	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
N-Propylbenzene	<0.00351		0.00351	0.000561	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
o-Xylene	0.00689		0.00351	0.000916	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
sec-Butylbenzene	<0.00351		0.00351	0.000610	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Styrene	0.00364		0.00351	0.000351	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Tert-amyl methyl ether	<0.00351		0.00351	0.00180	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Tert-butyl ethyl ether	<0.00351		0.00351	0.00309	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
tert-Butylbenzene	<0.00351		0.00351	0.000729	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Tetrachloroethene	0.257		0.00351	0.000941	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Tetrahydrofuran	<0.0701		0.0701	0.00645	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Toluene	0.00399		0.00351	0.000530	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
trans-1,2-Dichloroethene	<0.00351		0.00351	0.000724	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
trans-1,3-Dichloropropene	<0.00351		0.00351	0.00309	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Trichloroethene	0.00658		0.00351	0.00154	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Trichlorofluoromethane	<0.00701		0.00701	0.000663	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Vinyl chloride	<0.00351		0.00351	0.000856	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1
Dibromomethane	<0.00351		0.00351	0.000722	mg/Kg	☼	10/02/13 11:15	10/02/13 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		70 - 130	10/02/13 11:15	10/02/13 17:37	1
1,2-Dichloroethane-d4 (Surr)	104		70 - 130	10/02/13 11:15	10/02/13 17:37	1
4-Bromofluorobenzene (Surr)	93		70 - 130	10/02/13 11:15	10/02/13 17:37	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.665		0.256	0.0102	mg/Kg	☼		10/07/13 11:24	1
C9-C12 Aliphatics (adjusted)	<0.256		0.256	0.0102	mg/Kg	☼		10/07/13 11:24	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.676	B	0.255	0.0102	mg/Kg	☼	10/01/13 12:20	10/03/13 11:50	1
C9-C10 Aromatics	0.273		0.255	0.0102	mg/Kg	☼	10/01/13 12:20	10/03/13 11:50	1
C9-C12 Aliphatics (unadjusted)	0.538	B	0.255	0.0102	mg/Kg	☼	10/01/13 12:20	10/03/13 11:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	75		70 - 130	10/01/13 12:20	10/03/13 11:50	1
2,5-Dibromotoluene (pid)	78		70 - 130	10/01/13 12:20	10/03/13 11:50	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	1660		49.1	19.6	mg/Kg	☼	09/30/13 08:34	10/04/13 08:20	10
C19-C36 Aliphatics	242		49.1	19.6	mg/Kg	☼	09/30/13 08:34	10/04/13 08:20	10
C9-C18 Aliphatics	<49.1		49.1	19.6	mg/Kg	☼	09/30/13 08:34	10/04/13 08:20	10

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	1120		51.2	51.2	mg/Kg	☼		10/04/13 10:18	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-11 (1-2)

Date Collected: 09/25/13 09:15

Date Received: 09/28/13 01:00

Lab Sample ID: 480-46783-1

Matrix: Solid

Percent Solids: 97.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	53		40 - 140	09/30/13 08:34	10/04/13 08:20	10
2-Bromonaphthalene	70		40 - 140	09/30/13 08:34	10/04/13 08:20	10
2-Fluorobiphenyl	83		40 - 140	09/30/13 08:34	10/04/13 08:20	10
o-Terphenyl	40		40 - 140	09/30/13 08:34	10/04/13 08:20	10

Client Sample ID: WCSB-11 (2.5-3)

Date Collected: 09/25/13 09:20

Date Received: 09/28/13 01:00

Lab Sample ID: 480-46783-2

Matrix: Solid

Percent Solids: 93.7

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.347		0.347	0.221	mg/Kg	☼	10/01/13 10:09	10/04/13 14:36	10
PCB-1221	<0.347		0.347	0.168	mg/Kg	☼	10/01/13 10:09	10/04/13 14:36	10
PCB-1232	<0.347		0.347	0.147	mg/Kg	☼	10/01/13 10:09	10/04/13 14:36	10
PCB-1242	<0.347		0.347	0.137	mg/Kg	☼	10/01/13 10:09	10/04/13 14:36	10
PCB-1248	<0.347		0.347	0.179	mg/Kg	☼	10/01/13 10:09	10/04/13 14:36	10
PCB-1254	0.630		0.347	0.179	mg/Kg	☼	10/01/13 10:09	10/04/13 14:36	10
PCB-1260	<0.347		0.347	0.179	mg/Kg	☼	10/01/13 10:09	10/04/13 14:36	10
PCB-1262	<0.347		0.347	0.284	mg/Kg	☼	10/01/13 10:09	10/04/13 14:36	10
PCB-1268	<0.347		0.347	0.147	mg/Kg	☼	10/01/13 10:09	10/04/13 14:36	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	10/01/13 10:09	10/04/13 14:36	10
Tetrachloro-m-xylene	0	X	30 - 150	10/01/13 10:09	10/04/13 14:36	10
DCB Decachlorobiphenyl	197	X	30 - 150	10/01/13 10:09	10/04/13 14:36	10
DCB Decachlorobiphenyl	120		30 - 150	10/01/13 10:09	10/04/13 14:36	10

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	0.442	J	0.500	0.200	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1
Arsenic	4.99		1.00	0.400	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1
Barium	87.7		0.500	0.110	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1
Beryllium	0.662		0.200	0.0280	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1
Cadmium	26.3	^	0.200	0.0300	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1
Chromium	24.5		0.500	0.200	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1
Nickel	34.1		1.00	0.230	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1
Thallium	<1.00		1.00	0.300	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1
Vanadium	20.2		0.500	0.110	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1
Zinc	541	B	2.50	0.153	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1
Lead	460		0.500	0.240	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1
Selenium	0.761	^	0.500	0.400	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1
Antimony	1.50	^	0.500	0.400	mg/Kg	☼	09/30/13 14:10	10/01/13 19:58	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.24		0.514	0.0417	mg/Kg	☼	09/30/13 10:40	09/30/13 13:50	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-7 (2.5-3)

Lab Sample ID: 480-46783-3

Date Collected: 09/25/13 10:45

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 90.9

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0368		0.0368	0.0234	mg/Kg	☼	10/01/13 09:24	10/04/13 16:36	1
PCB-1221	<0.0368		0.0368	0.0178	mg/Kg	☼	10/01/13 09:24	10/04/13 16:36	1
PCB-1232	<0.0368		0.0368	0.0156	mg/Kg	☼	10/01/13 09:24	10/04/13 16:36	1
PCB-1242	<0.0368		0.0368	0.0145	mg/Kg	☼	10/01/13 09:24	10/04/13 16:36	1
PCB-1248	<0.0368		0.0368	0.0189	mg/Kg	☼	10/01/13 09:24	10/04/13 16:36	1
PCB-1254	<0.0368		0.0368	0.0189	mg/Kg	☼	10/01/13 09:24	10/04/13 16:36	1
PCB-1260	0.0381		0.0368	0.0189	mg/Kg	☼	10/01/13 09:24	10/04/13 16:36	1
PCB-1262	<0.0368		0.0368	0.0301	mg/Kg	☼	10/01/13 09:24	10/04/13 16:36	1
PCB-1268	<0.0368		0.0368	0.0156	mg/Kg	☼	10/01/13 09:24	10/04/13 16:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	57		30 - 150				10/01/13 09:24	10/04/13 16:36	1
Tetrachloro-m-xylene	64		30 - 150				10/01/13 09:24	10/04/13 16:36	1
DCB Decachlorobiphenyl	280	X	30 - 150				10/01/13 09:24	10/04/13 16:36	1
DCB Decachlorobiphenyl	46		30 - 150				10/01/13 09:24	10/04/13 16:36	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.28		0.501	0.201	mg/Kg	☼	09/30/13 14:10	10/01/13 20:01	1
Arsenic	8.00		1.00	0.401	mg/Kg	☼	09/30/13 14:10	10/01/13 20:01	1
Barium	230		0.501	0.110	mg/Kg	☼	09/30/13 14:10	10/01/13 20:01	1
Beryllium	0.442		0.201	0.0281	mg/Kg	☼	09/30/13 14:10	10/01/13 20:01	1
Cadmium	6.93	^	0.201	0.0301	mg/Kg	☼	09/30/13 14:10	10/01/13 20:01	1
Chromium	518		0.501	0.201	mg/Kg	☼	09/30/13 14:10	10/01/13 20:01	1
Nickel	62.6		1.00	0.231	mg/Kg	☼	09/30/13 14:10	10/01/13 20:01	1
Thallium	0.831	J	1.00	0.301	mg/Kg	☼	09/30/13 14:10	10/01/13 20:01	1
Vanadium	213		0.501	0.110	mg/Kg	☼	09/30/13 14:10	10/01/13 20:01	1
Zinc	5720	B	12.5	0.767	mg/Kg	☼	09/30/13 14:10	10/02/13 22:52	5
Lead	895		0.501	0.241	mg/Kg	☼	09/30/13 14:10	10/01/13 20:01	1
Selenium	4.06	^	0.501	0.401	mg/Kg	☼	09/30/13 14:10	10/01/13 20:01	1
Antimony	3.49	^	0.501	0.401	mg/Kg	☼	09/30/13 14:10	10/01/13 20:01	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.94		1.06	0.0860	mg/Kg	☼	09/30/13 10:40	09/30/13 13:52	10

Client Sample ID: WCSB-7 (4-5)

Lab Sample ID: 480-46783-4

Date Collected: 09/25/13 10:55

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 88.5

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00256		0.00256	0.000512	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,1,1-Trichloroethane	<0.00256		0.00256	0.000372	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,1,2,2-Tetrachloroethane	<0.00256		0.00256	0.000830	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,1,2-Trichloroethane	<0.00256		0.00256	0.000665	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,1-Dichloroethane	<0.00256		0.00256	0.000624	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,1-Dichloroethene	<0.00256		0.00256	0.000626	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,1-Dichloropropene	<0.00256		0.00256	0.000727	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,2,3-Trichlorobenzene	<0.00256		0.00256	0.000544	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-7 (4-5)

Lab Sample ID: 480-46783-4

Date Collected: 09/25/13 10:55

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 88.5

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.00256		0.00256	0.000521	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,2,4-Trichlorobenzene	<0.00256		0.00256	0.000311	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,2,4-Trimethylbenzene	<0.00256		0.00256	0.000983	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,2-Dibromo-3-Chloropropane	<0.0256		0.0256	0.00256	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,2-Dichlorobenzene	<0.00256		0.00256	0.000400	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,2-Dichloroethane	<0.00256		0.00256	0.000257	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,2-Dichloropropane	<0.00256		0.00256	0.00256	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,3,5-Trimethylbenzene	<0.00256		0.00256	0.000330	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,3-Dichlorobenzene	<0.00256		0.00256	0.000263	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,3-Dichloropropane	<0.00256		0.00256	0.000307	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,4-Dichlorobenzene	<0.00256		0.00256	0.000717	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
1,4-Dioxane	<0.256		0.256	0.0247	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
2,2-Dichloropropane	<0.00256		0.00256	0.000870	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
2-Butanone (MEK)	<0.0256	*	0.0256	0.00187	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
2-Chlorotoluene	<0.00256		0.00256	0.000336	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
2-Hexanone	<0.0256		0.0256	0.00256	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
4-Chlorotoluene	<0.00256		0.00256	0.000604	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
4-Isopropyltoluene	<0.00256		0.00256	0.000410	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
4-Methyl-2-pentanone (MIBK)	<0.0256		0.0256	0.00168	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Acetone	0.00914	J	0.256	0.00431	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Benzene	<0.00256		0.00256	0.000251	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Bromobenzene	<0.00256		0.00256	0.000901	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Bromoform	<0.00256		0.00256	0.00256	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Bromomethane	<0.00512		0.00512	0.000461	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Carbon disulfide	<0.00256		0.00256	0.00256	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Carbon tetrachloride	<0.00256		0.00256	0.000495	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Chlorobenzene	<0.00256		0.00256	0.000676	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Chlorobromomethane	<0.00256		0.00256	0.000370	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Chlorodibromomethane	<0.00256		0.00256	0.000655	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Chloroethane	<0.00512		0.00512	0.00116	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Chloroform	<0.00256		0.00256	0.000316	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Chloromethane	<0.00512		0.00512	0.000309	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
cis-1,2-Dichloroethene	<0.00256		0.00256	0.000655	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
cis-1,3-Dichloropropene	<0.00256		0.00256	0.000737	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Dichlorobromomethane	<0.00256		0.00256	0.000686	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Dichlorodifluoromethane	<0.00512		0.00512	0.000423	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Ethyl ether	<0.00256		0.00256	0.00215	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Ethylbenzene	<0.00256		0.00256	0.000353	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Ethylene Dibromide	<0.00256		0.00256	0.000657	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Hexachlorobutadiene	<0.00256		0.00256	0.000600	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Isopropyl ether	<0.00256		0.00256	0.00256	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Isopropylbenzene	<0.00256		0.00256	0.000772	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Methyl tert-butyl ether	<0.00256		0.00256	0.000503	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Methylene Chloride	<0.00256		0.00256	0.00235	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
m-Xylene & p-Xylene	<0.00512		0.00512	0.000860	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Naphthalene	<0.0256		0.0256	0.000686	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
n-Butylbenzene	<0.00256		0.00256	0.000445	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
N-Propylbenzene	<0.00256		0.00256	0.000409	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
o-Xylene	<0.00256		0.00256	0.000668	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-7 (4-5)

Lab Sample ID: 480-46783-4

Date Collected: 09/25/13 10:55

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 88.5

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.00256		0.00256	0.000445	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Styrene	<0.00256		0.00256	0.000256	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Tert-amyl methyl ether	<0.00256		0.00256	0.00131	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Tert-butyl ethyl ether	<0.00256		0.00256	0.00225	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
tert-Butylbenzene	<0.00256		0.00256	0.000532	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Tetrachloroethene	0.0102		0.00256	0.000687	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Tetrahydrofuran	<0.0512		0.0512	0.00471	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Toluene	<0.00256		0.00256	0.000387	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
trans-1,2-Dichloroethene	<0.00256		0.00256	0.000528	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
trans-1,3-Dichloropropene	<0.00256		0.00256	0.00225	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Trichloroethene	<0.00256		0.00256	0.00113	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Trichlorofluoromethane	<0.00512		0.00512	0.000484	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Vinyl chloride	<0.00256		0.00256	0.000624	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1
Dibromomethane	<0.00256		0.00256	0.000527	mg/Kg	☼	10/02/13 11:15	10/02/13 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		70 - 130	10/02/13 11:15	10/02/13 18:03	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	10/02/13 11:15	10/02/13 18:03	1
4-Bromofluorobenzene (Surr)	95		70 - 130	10/02/13 11:15	10/02/13 18:03	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.0523	J	0.283	0.0113	mg/Kg	☼		10/07/13 11:24	1
C9-C12 Aliphatics (adjusted)	<0.283		0.283	0.0113	mg/Kg	☼		10/07/13 11:24	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.0463	J B	0.213	0.00852	mg/Kg	☼	10/01/13 12:20	10/02/13 03:25	1
C9-C10 Aromatics	0.0362	J	0.213	0.00852	mg/Kg	☼	10/01/13 12:20	10/02/13 03:25	1
C9-C12 Aliphatics (unadjusted)	0.0380	J	0.213	0.00852	mg/Kg	☼	10/01/13 12:20	10/02/13 03:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	88		70 - 130	10/01/13 12:20	10/02/13 03:25	1
2,5-Dibromotoluene (pid)	87		70 - 130	10/01/13 12:20	10/02/13 03:25	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	<5.34		5.34	2.14	mg/Kg	☼	09/30/13 08:34	10/02/13 14:21	1
C19-C36 Aliphatics	4.91	J	5.34	2.14	mg/Kg	☼	09/30/13 08:34	10/02/13 14:21	1
C9-C18 Aliphatics	2.42	J B	5.34	2.14	mg/Kg	☼	09/30/13 08:34	10/02/13 14:21	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<5.65		5.65	5.65	mg/Kg	☼		10/04/13 10:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	83		40 - 140	09/30/13 08:34	10/02/13 14:21	1
2-Bromonaphthalene	95		40 - 140	09/30/13 08:34	10/02/13 14:21	1
2-Fluorobiphenyl	110		40 - 140	09/30/13 08:34	10/02/13 14:21	1
o-Terphenyl	88		40 - 140	09/30/13 08:34	10/02/13 14:21	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-7 (7.5-8)

Lab Sample ID: 480-46783-5

Date Collected: 09/25/13 11:10

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 65.3

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00418		0.00418	0.000836	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,1,1-Trichloroethane	<0.00418		0.00418	0.000607	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,1,2,2-Tetrachloroethane	<0.00418		0.00418	0.00136	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,1,2-Trichloroethane	<0.00418		0.00418	0.00109	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,1-Dichloroethane	<0.00418		0.00418	0.00102	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,1-Dichloroethene	<0.00418		0.00418	0.00102	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,1-Dichloropropene	<0.00418		0.00418	0.00119	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,2,3-Trichlorobenzene	<0.00418		0.00418	0.000888	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,2,3-Trichloropropane	<0.00418		0.00418	0.000851	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,2,4-Trichlorobenzene	<0.00418		0.00418	0.000509	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,2,4-Trimethylbenzene	<0.00418		0.00418	0.00161	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,2-Dibromo-3-Chloropropane	<0.0418		0.0418	0.00418	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,2-Dichlorobenzene	<0.00418		0.00418	0.000654	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,2-Dichloroethane	<0.00418		0.00418	0.000420	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,2-Dichloropropane	<0.00418		0.00418	0.00418	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,3,5-Trimethylbenzene	<0.00418		0.00418	0.000539	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,3-Dichlorobenzene	<0.00418		0.00418	0.000430	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,3-Dichloropropane	<0.00418		0.00418	0.000502	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,4-Dichlorobenzene	<0.00418		0.00418	0.00117	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
1,4-Dioxane	<0.418		0.418	0.0403	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
2,2-Dichloropropane	<0.00418		0.00418	0.00142	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
2-Butanone (MEK)	<0.0418		0.0418	0.00306	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
2-Chlorotoluene	<0.00418		0.00418	0.000549	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
2-Hexanone	<0.0418		0.0418	0.00418	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
4-Chlorotoluene	<0.00418		0.00418	0.000987	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
4-Isopropyltoluene	<0.00418		0.00418	0.000671	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
4-Methyl-2-pentanone (MIBK)	<0.0418		0.0418	0.00274	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Acetone	0.0750 J		0.418	0.00704	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Benzene	<0.00418		0.00418	0.000410	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Bromobenzene	<0.00418		0.00418	0.00147	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Bromoform	<0.00418		0.00418	0.00418	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Bromomethane	<0.00836		0.00836	0.000753	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Carbon disulfide	0.00834		0.00418	0.00418	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Carbon tetrachloride	<0.00418		0.00418	0.000810	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Chlorobenzene	<0.00418		0.00418	0.00110	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Chlorobromomethane	<0.00418		0.00418	0.000604	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Chlorodibromomethane	<0.00418		0.00418	0.00107	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Chloroethane	<0.00836		0.00836	0.00189	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Chloroform	<0.00418		0.00418	0.000517	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Chloromethane	<0.00836 *		0.00836	0.000505	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
cis-1,2-Dichloroethene	<0.00418		0.00418	0.00107	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
cis-1,3-Dichloropropene	<0.00418		0.00418	0.00120	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Dichlorobromomethane	<0.00418		0.00418	0.00112	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Dichlorodifluoromethane	<0.00836		0.00836	0.000691	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Ethyl ether	<0.00418		0.00418	0.00351	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Ethylbenzene	<0.00418		0.00418	0.000577	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Ethylene Dibromide	<0.00418		0.00418	0.00107	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Hexachlorobutadiene	<0.00418		0.00418	0.000980	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Isopropyl ether	<0.00418		0.00418	0.00418	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-7 (7.5-8)

Lab Sample ID: 480-46783-5

Date Collected: 09/25/13 11:10

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 65.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	<0.00418		0.00418	0.00126	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Methyl tert-butyl ether	<0.00418		0.00418	0.000821	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Methylene Chloride	<0.00418		0.00418	0.00385	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
m-Xylene & p-Xylene	<0.00836		0.00836	0.00141	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Naphthalene	<0.0418		0.0418	0.00112	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
n-Butylbenzene	<0.00418		0.00418	0.000728	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
N-Propylbenzene	<0.00418		0.00418	0.000669	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
o-Xylene	<0.00418		0.00418	0.00109	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
sec-Butylbenzene	<0.00418		0.00418	0.000728	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Styrene	<0.00418		0.00418	0.000418	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Tert-amyl methyl ether	<0.00418		0.00418	0.00214	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Tert-butyl ethyl ether	<0.00418		0.00418	0.00368	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
tert-Butylbenzene	<0.00418		0.00418	0.000870	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Tetrachloroethene	<0.00418 *		0.00418	0.00112	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Tetrahydrofuran	<0.0836		0.0836	0.00769	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Toluene	<0.00418		0.00418	0.000632	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
trans-1,2-Dichloroethene	<0.00418		0.00418	0.000863	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
trans-1,3-Dichloropropene	<0.00418		0.00418	0.00368	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Trichloroethene	<0.00418		0.00418	0.00184	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Trichlorofluoromethane	<0.00836		0.00836	0.000791	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Vinyl chloride	<0.00418		0.00418	0.00102	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1
Dibromomethane	<0.00418		0.00418	0.000861	mg/Kg	☼	10/01/13 11:37	10/01/13 18:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130	10/01/13 11:37	10/01/13 18:30	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 130	10/01/13 11:37	10/01/13 18:30	1
4-Bromofluorobenzene (Surr)	114		70 - 130	10/01/13 11:37	10/01/13 18:30	1

Client Sample ID: WCSB-8 (2-2.5)

Lab Sample ID: 480-46783-6

Date Collected: 09/25/13 12:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 86.4

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0777		0.0777	0.0155	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,1,1-Trichloroethane	<0.0777		0.0777	0.0113	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,1,2,2-Tetrachloroethane	<0.0777		0.0777	0.0252	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,1,2-Trichloroethane	<0.0777		0.0777	0.0202	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,1-Dichloroethane	<0.0777		0.0777	0.0190	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,1-Dichloroethene	<0.0777		0.0777	0.0190	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,1-Dichloropropene	<0.0777		0.0777	0.0221	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,2,3-Trichlorobenzene	<0.0777		0.0777	0.0165	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,2,3-Trichloropropane	<0.0777		0.0777	0.0158	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,2,4-Trichlorobenzene	<0.0777		0.0777	0.00944	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,2,4-Trimethylbenzene	0.0519	J	0.0777	0.0298	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,2-Dibromo-3-Chloropropane	<0.777		0.777	0.0777	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,2-Dichlorobenzene	<0.0777		0.0777	0.0121	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,2-Dichloroethane	<0.0777		0.0777	0.00780	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,2-Dichloropropane	<0.0777		0.0777	0.0777	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,3,5-Trimethylbenzene	0.0197	J	0.0777	0.0100	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-8 (2-2.5)

Lab Sample ID: 480-46783-6

Date Collected: 09/25/13 12:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 86.4

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	<0.0777		0.0777	0.00798	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,3-Dichloropropane	<0.0777		0.0777	0.00932	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,4-Dichlorobenzene	<0.0777		0.0777	0.0217	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
1,4-Dioxane	<7.77	*	7.77	0.749	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
2,2-Dichloropropane	<0.0777		0.0777	0.0264	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
2-Butanone (MEK)	<0.777	*	0.777	0.0569	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
2-Chlorotoluene	<0.0777		0.0777	0.0102	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
2-Hexanone	<0.777		0.777	0.0777	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
4-Chlorotoluene	<0.0777		0.0777	0.0183	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
4-Isopropyltoluene	<0.0777		0.0777	0.0125	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
4-Methyl-2-pentanone (MIBK)	<0.777		0.777	0.0509	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Acetone	<7.77		7.77	0.131	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Benzene	<0.0777		0.0777	0.00761	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Bromobenzene	<0.0777		0.0777	0.0273	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Bromoform	<0.0777		0.0777	0.0777	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Bromomethane	<0.155		0.155	0.0140	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Carbon disulfide	<0.0777		0.0777	0.0777	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Carbon tetrachloride	<0.0777		0.0777	0.0150	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Chlorobenzene	<0.0777		0.0777	0.0205	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Chlorobromomethane	<0.0777		0.0777	0.0112	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Chlorodibromomethane	<0.0777		0.0777	0.0199	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Chloroethane	<0.155		0.155	0.0351	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Chloroform	<0.0777		0.0777	0.00960	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Chloromethane	<0.155		0.155	0.00938	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
cis-1,2-Dichloroethene	<0.0777		0.0777	0.0199	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
cis-1,3-Dichloropropene	<0.0777		0.0777	0.0224	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Dichlorobromomethane	<0.0777		0.0777	0.0208	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Dichlorodifluoromethane	<0.155	*	0.155	0.0128	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Ethyl ether	<0.0777		0.0777	0.0652	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Ethylbenzene	<0.0777		0.0777	0.0107	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Ethylene Dibromide	<0.0777		0.0777	0.0199	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Hexachlorobutadiene	<0.0777		0.0777	0.0182	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Isopropyl ether	<0.0777		0.0777	0.0777	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Isopropylbenzene	<0.0777		0.0777	0.0234	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Methyl tert-butyl ether	<0.0777		0.0777	0.0153	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Methylene Chloride	<0.0777		0.0777	0.0715	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
m-Xylene & p-Xylene	0.0275	J	0.155	0.0261	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
n-Butylbenzene	<0.0777		0.0777	0.0135	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
N-Propylbenzene	<0.0777		0.0777	0.0124	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
o-Xylene	0.0216	J	0.0777	0.0203	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
sec-Butylbenzene	<0.0777		0.0777	0.0135	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Styrene	0.0149	J	0.0777	0.00777	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Tert-amyl methyl ether	<0.0777		0.0777	0.0398	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Tert-butyl ethyl ether	<0.0777		0.0777	0.0683	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
tert-Butylbenzene	<0.0777		0.0777	0.0162	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Tetrachloroethene	0.198		0.0777	0.0208	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Tetrahydrofuran	<1.55		1.55	0.143	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Toluene	0.0152	J	0.0777	0.0117	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
trans-1,2-Dichloroethene	<0.0777		0.0777	0.0160	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-8 (2-2.5)

Lab Sample ID: 480-46783-6

Date Collected: 09/25/13 12:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 86.4

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	<0.0777		0.0777	0.0683	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Trichloroethene	<0.0777		0.0777	0.0342	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Trichlorofluoromethane	<0.155		0.155	0.0147	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Vinyl chloride	<0.0777		0.0777	0.0190	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1
Dibromomethane	<0.0777		0.0777	0.0160	mg/Kg	☼	10/03/13 12:44	10/03/13 20:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130	10/03/13 12:44	10/03/13 20:13	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	10/03/13 12:44	10/03/13 20:13	1
4-Bromofluorobenzene (Surr)	101		70 - 130	10/03/13 12:44	10/03/13 20:13	1

Method: 8260C - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	11.2		6.21	0.167	mg/Kg	☼	10/03/13 12:44	10/04/13 17:02	8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130	10/03/13 12:44	10/04/13 17:02	8
1,2-Dichloroethane-d4 (Surr)	97		70 - 130	10/03/13 12:44	10/04/13 17:02	8
4-Bromofluorobenzene (Surr)	103		70 - 130	10/03/13 12:44	10/04/13 17:02	8

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	1.31	J	14.5	0.579	mg/Kg	☼		10/07/13 11:24	50
C9-C12 Aliphatics (adjusted)	<14.5		14.5	0.579	mg/Kg	☼		10/07/13 11:24	50

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	1.31	J B	14.9	0.596	mg/Kg	☼	10/01/13 12:20	10/02/13 04:03	50
C9-C10 Aromatics	1.53	J	14.9	0.596	mg/Kg	☼	10/01/13 12:20	10/02/13 04:03	50
C9-C12 Aliphatics (unadjusted)	1.11	J	14.9	0.596	mg/Kg	☼	10/01/13 12:20	10/02/13 04:03	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	90		70 - 130				10/01/13 12:20	10/02/13 04:03	50
2,5-Dibromotoluene (pid)	90		70 - 130				10/01/13 12:20	10/02/13 04:03	50

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	422		5.63	2.25	mg/Kg	☼	09/30/13 08:34	10/02/13 14:51	1
C19-C36 Aliphatics	501		5.63	2.25	mg/Kg	☼	09/30/13 08:34	10/02/13 14:51	1
C9-C18 Aliphatics	5.01	J B	5.63	2.25	mg/Kg	☼	09/30/13 08:34	10/02/13 14:51	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	183		5.79	5.79	mg/Kg	☼		10/04/13 10:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	49		40 - 140	09/30/13 08:34	10/02/13 14:51	1
2-Bromonaphthalene	109		40 - 140	09/30/13 08:34	10/02/13 14:51	1
2-Fluorobiphenyl	125		40 - 140	09/30/13 08:34	10/02/13 14:51	1
o-Terphenyl	48		40 - 140	09/30/13 08:34	10/02/13 14:51	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-8 (2.5-3)

Lab Sample ID: 480-46783-7

Date Collected: 09/25/13 12:20

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 71.6

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0454		0.0454	0.0289	mg/Kg	☼	10/01/13 09:24	10/04/13 16:51	1
PCB-1221	<0.0454		0.0454	0.0220	mg/Kg	☼	10/01/13 09:24	10/04/13 16:51	1
PCB-1232	<0.0454		0.0454	0.0192	mg/Kg	☼	10/01/13 09:24	10/04/13 16:51	1
PCB-1242	<0.0454		0.0454	0.0179	mg/Kg	☼	10/01/13 09:24	10/04/13 16:51	1
PCB-1248	<0.0454		0.0454	0.0234	mg/Kg	☼	10/01/13 09:24	10/04/13 16:51	1
PCB-1254	<0.0454		0.0454	0.0234	mg/Kg	☼	10/01/13 09:24	10/04/13 16:51	1
PCB-1260	0.126		0.0454	0.0234	mg/Kg	☼	10/01/13 09:24	10/04/13 16:51	1
PCB-1262	<0.0454		0.0454	0.0371	mg/Kg	☼	10/01/13 09:24	10/04/13 16:51	1
PCB-1268	<0.0454		0.0454	0.0192	mg/Kg	☼	10/01/13 09:24	10/04/13 16:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	59		30 - 150				10/01/13 09:24	10/04/13 16:51	1
Tetrachloro-m-xylene	67		30 - 150				10/01/13 09:24	10/04/13 16:51	1
DCB Decachlorobiphenyl	141		30 - 150				10/01/13 09:24	10/04/13 16:51	1
DCB Decachlorobiphenyl	77		30 - 150				10/01/13 09:24	10/04/13 16:51	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.642		0.642	0.257	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1
Arsenic	11.1		1.28	0.513	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1
Barium	41.8		0.642	0.141	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1
Beryllium	0.499		0.257	0.0359	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1
Cadmium	2.73 ^		0.257	0.0385	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1
Chromium	32.6		0.642	0.257	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1
Nickel	34.4		1.28	0.295	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1
Thallium	<1.28		1.28	0.385	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1
Vanadium	14.2		0.642	0.141	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1
Zinc	157 B		3.21	0.196	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1
Lead	62.1		0.642	0.308	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1
Selenium	1.25 ^		0.642	0.513	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1
Antimony	0.613 J ^		0.642	0.513	mg/Kg	☼	09/30/13 14:10	10/01/13 20:03	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0568 J		0.137	0.0111	mg/Kg	☼	09/30/13 10:40	09/30/13 12:10	1

Client Sample ID: WCSB-8 (7-8)

Lab Sample ID: 480-46783-8

Date Collected: 09/25/13 12:30

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 68.9

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00307		0.00307	0.000613	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,1,1-Trichloroethane	<0.00307		0.00307	0.000445	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,1,2,2-Tetrachloroethane	<0.00307		0.00307	0.000995	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,1,2-Trichloroethane	<0.00307		0.00307	0.000797	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,1-Dichloroethane	<0.00307		0.00307	0.000748	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,1-Dichloroethene	<0.00307		0.00307	0.000751	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,1-Dichloropropene	<0.00307		0.00307	0.000871	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,2,3-Trichlorobenzene	<0.00307		0.00307	0.000651	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-8 (7-8)

Lab Sample ID: 480-46783-8

Date Collected: 09/25/13 12:30

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 68.9

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.00307		0.00307	0.000624	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,2,4-Trichlorobenzene	<0.00307		0.00307	0.000373	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,2,4-Trimethylbenzene	<0.00307		0.00307	0.00118	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,2-Dibromo-3-Chloropropane	<0.0307		0.0307	0.00307	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,2-Dichlorobenzene	<0.00307		0.00307	0.000479	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,2-Dichloroethane	<0.00307		0.00307	0.000308	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,2-Dichloropropane	<0.00307		0.00307	0.00307	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,3,5-Trimethylbenzene	<0.00307		0.00307	0.000395	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,3-Dichlorobenzene	<0.00307		0.00307	0.000315	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,3-Dichloropropane	<0.00307		0.00307	0.000368	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,4-Dichlorobenzene	<0.00307		0.00307	0.000858	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
1,4-Dioxane	<0.307		0.307	0.0296	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
2,2-Dichloropropane	<0.00307		0.00307	0.00104	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
2-Butanone (MEK)	0.0403		0.0307	0.00224	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
2-Chlorotoluene	<0.00307		0.00307	0.000402	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
2-Hexanone	<0.0307		0.0307	0.00307	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
4-Chlorotoluene	<0.00307		0.00307	0.000724	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
4-Isopropyltoluene	<0.00307		0.00307	0.000492	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
4-Methyl-2-pentanone (MIBK)	<0.0307		0.0307	0.00201	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Acetone	0.167	J	0.307	0.00516	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Benzene	0.00102	J	0.00307	0.000300	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Bromobenzene	<0.00307		0.00307	0.00108	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Bromoform	<0.00307		0.00307	0.00307	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Bromomethane	<0.00613		0.00613	0.000552	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Carbon disulfide	0.0241		0.00307	0.00307	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Carbon tetrachloride	<0.00307		0.00307	0.000594	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Chlorobenzene	<0.00307		0.00307	0.000809	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Chlorobromomethane	<0.00307		0.00307	0.000443	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Chlorodibromomethane	<0.00307		0.00307	0.000785	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Chloroethane	<0.00613		0.00613	0.00139	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Chloroform	<0.00307		0.00307	0.000379	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Chloromethane	<0.00613	*	0.00613	0.000370	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
cis-1,2-Dichloroethene	<0.00307		0.00307	0.000785	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
cis-1,3-Dichloropropene	<0.00307		0.00307	0.000883	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Dichlorobromomethane	<0.00307		0.00307	0.000822	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Dichlorodifluoromethane	<0.00613		0.00613	0.000506	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Ethyl ether	<0.00307		0.00307	0.00258	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Ethylbenzene	<0.00307		0.00307	0.000423	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Ethylene Dibromide	<0.00307		0.00307	0.000787	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Hexachlorobutadiene	<0.00307		0.00307	0.000719	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Isopropyl ether	<0.00307		0.00307	0.00307	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Isopropylbenzene	<0.00307		0.00307	0.000925	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Methyl tert-butyl ether	<0.00307		0.00307	0.000602	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Methylene Chloride	<0.00307		0.00307	0.00282	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
m-Xylene & p-Xylene	<0.00613		0.00613	0.00103	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Naphthalene	0.00497	J	0.0307	0.000822	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
n-Butylbenzene	<0.00307		0.00307	0.000533	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
N-Propylbenzene	<0.00307		0.00307	0.000491	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
o-Xylene	<0.00307		0.00307	0.000801	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-8 (7-8)

Lab Sample ID: 480-46783-8

Date Collected: 09/25/13 12:30

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 68.9

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.00307		0.00307	0.000533	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Styrene	<0.00307		0.00307	0.000307	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Tert-amyl methyl ether	<0.00307		0.00307	0.00157	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Tert-butyl ethyl ether	<0.00307		0.00307	0.00270	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
tert-Butylbenzene	<0.00307		0.00307	0.000638	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Tetrachloroethene	<0.00307 *		0.00307	0.000823	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Tetrahydrofuran	<0.0613		0.0613	0.00564	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Toluene	<0.00307		0.00307	0.000464	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
trans-1,2-Dichloroethene	<0.00307		0.00307	0.000633	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
trans-1,3-Dichloropropene	<0.00307		0.00307	0.00270	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Trichloroethene	<0.00307		0.00307	0.00135	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Trichlorofluoromethane	<0.00613		0.00613	0.000580	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Vinyl chloride	<0.00307		0.00307	0.000748	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1
Dibromomethane	<0.00307		0.00307	0.000632	mg/Kg	☼	10/01/13 11:37	10/01/13 19:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130	10/01/13 11:37	10/01/13 19:21	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 130	10/01/13 11:37	10/01/13 19:21	1
4-Bromofluorobenzene (Surr)	115		70 - 130	10/01/13 11:37	10/01/13 19:21	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.451		0.363	0.0145	mg/Kg	☼		10/07/13 11:24	1
C9-C12 Aliphatics (adjusted)	0.733		0.363	0.0145	mg/Kg	☼		10/07/13 11:24	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.347	B	0.347	0.0139	mg/Kg	☼	10/01/13 12:20	10/03/13 12:28	1
C9-C10 Aromatics	0.291	J	0.347	0.0139	mg/Kg	☼	10/01/13 12:20	10/03/13 12:28	1
C9-C12 Aliphatics (unadjusted)	0.813	B	0.347	0.0139	mg/Kg	☼	10/01/13 12:20	10/03/13 12:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	84		70 - 130	10/01/13 12:20	10/03/13 12:28	1
2,5-Dibromotoluene (pid)	84		70 - 130	10/01/13 12:20	10/03/13 12:28	1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0475		0.0475	0.0302	mg/Kg	☼	10/01/13 09:24	10/03/13 21:23	1
PCB-1221	<0.0475		0.0475	0.0230	mg/Kg	☼	10/01/13 09:24	10/03/13 21:23	1
PCB-1232	<0.0475		0.0475	0.0201	mg/Kg	☼	10/01/13 09:24	10/03/13 21:23	1
PCB-1242	<0.0475		0.0475	0.0187	mg/Kg	☼	10/01/13 09:24	10/03/13 21:23	1
PCB-1248	<0.0475		0.0475	0.0244	mg/Kg	☼	10/01/13 09:24	10/03/13 21:23	1
PCB-1254	<0.0475		0.0475	0.0244	mg/Kg	☼	10/01/13 09:24	10/03/13 21:23	1
PCB-1260	<0.0475		0.0475	0.0244	mg/Kg	☼	10/01/13 09:24	10/03/13 21:23	1
PCB-1262	<0.0475		0.0475	0.0388	mg/Kg	☼	10/01/13 09:24	10/03/13 21:23	1
PCB-1268	<0.0475		0.0475	0.0201	mg/Kg	☼	10/01/13 09:24	10/03/13 21:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		30 - 150	10/01/13 09:24	10/03/13 21:23	1
Tetrachloro-m-xylene	67		30 - 150	10/01/13 09:24	10/03/13 21:23	1
DCB Decachlorobiphenyl	58		30 - 150	10/01/13 09:24	10/03/13 21:23	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-8 (7-8)

Lab Sample ID: 480-46783-8

Date Collected: 09/25/13 12:30

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 68.9

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	64		30 - 150	10/01/13 09:24	10/03/13 21:23	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	21.3		6.76	2.70	mg/Kg	☼	09/30/13 08:34	10/02/13 15:20	1
C19-C36 Aliphatics	53.8		6.76	2.70	mg/Kg	☼	09/30/13 08:34	10/02/13 15:20	1
C9-C18 Aliphatics	4.29	J B	6.76	2.70	mg/Kg	☼	09/30/13 08:34	10/02/13 15:20	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	18.2		7.26	7.26	mg/Kg	☼		10/04/13 10:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	69		40 - 140	09/30/13 08:34	10/02/13 15:20	1
2-Bromonaphthalene	104		40 - 140	09/30/13 08:34	10/02/13 15:20	1
2-Fluorobiphenyl	117		40 - 140	09/30/13 08:34	10/02/13 15:20	1
o-Terphenyl	74		40 - 140	09/30/13 08:34	10/02/13 15:20	1

Client Sample ID: WCSB-6 (2.5-3)

Lab Sample ID: 480-46783-9

Date Collected: 09/25/13 14:00

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 96.1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0342		0.0342	0.0218	mg/Kg	☼	10/01/13 09:24	10/06/13 16:32	1
PCB-1221	<0.0342		0.0342	0.0166	mg/Kg	☼	10/01/13 09:24	10/06/13 16:32	1
PCB-1232	<0.0342		0.0342	0.0145	mg/Kg	☼	10/01/13 09:24	10/06/13 16:32	1
PCB-1242	<0.0342		0.0342	0.0135	mg/Kg	☼	10/01/13 09:24	10/06/13 16:32	1
PCB-1248	<0.0342		0.0342	0.0176	mg/Kg	☼	10/01/13 09:24	10/06/13 16:32	1
PCB-1254	0.121		0.0342	0.0176	mg/Kg	☼	10/01/13 09:24	10/06/13 16:32	1
PCB-1260	<0.0342		0.0342	0.0176	mg/Kg	☼	10/01/13 09:24	10/06/13 16:32	1
PCB-1262	<0.0342		0.0342	0.0280	mg/Kg	☼	10/01/13 09:24	10/06/13 16:32	1
PCB-1268	<0.0342		0.0342	0.0145	mg/Kg	☼	10/01/13 09:24	10/06/13 16:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		30 - 150	10/01/13 09:24	10/06/13 16:32	1
Tetrachloro-m-xylene	73		30 - 150	10/01/13 09:24	10/06/13 16:32	1
DCB Decachlorobiphenyl	69		30 - 150	10/01/13 09:24	10/06/13 16:32	1
DCB Decachlorobiphenyl	84		30 - 150	10/01/13 09:24	10/06/13 16:32	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.494		0.494	0.197	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1
Arsenic	2.81		0.987	0.395	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1
Barium	39.5		0.494	0.109	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1
Beryllium	0.424		0.197	0.0276	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1
Cadmium	1.75	^	0.197	0.0296	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1
Chromium	18.4		0.494	0.197	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1
Nickel	28.1		0.987	0.227	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1
Thallium	<0.987		0.987	0.296	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1
Vanadium	13.0		0.494	0.109	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1
Zinc	645	B	2.47	0.151	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-6 (2.5-3)

Lab Sample ID: 480-46783-9

Date Collected: 09/25/13 14:00

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 96.1

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	145		0.494	0.237	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1
Selenium	<0.494	^	0.494	0.395	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1
Antimony	0.413	J ^	0.494	0.395	mg/Kg	☼	09/30/13 14:10	10/01/13 20:05	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.123		0.0996	0.00807	mg/Kg	☼	09/30/13 10:40	09/30/13 12:12	1

Client Sample ID: WCSB-6 (4-5)

Lab Sample ID: 480-46783-10

Date Collected: 09/25/13 14:05

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 81.2

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00283		0.00283	0.000566	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,1,1-Trichloroethane	<0.00283		0.00283	0.000411	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,1,2,2-Tetrachloroethane	<0.00283		0.00283	0.000918	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,1,2-Trichloroethane	<0.00283		0.00283	0.000736	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,1-Dichloroethane	<0.00283		0.00283	0.000690	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,1-Dichloroethene	<0.00283		0.00283	0.000693	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,1-Dichloropropene	<0.00283		0.00283	0.000804	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,2,3-Trichlorobenzene	<0.00283		0.00283	0.000601	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,2,3-Trichloropropane	<0.00283		0.00283	0.000576	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,2,4-Trichlorobenzene	<0.00283		0.00283	0.000344	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,2,4-Trimethylbenzene	<0.00283		0.00283	0.00109	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,2-Dibromo-3-Chloropropane	<0.0283		0.0283	0.00283	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,2-Dichlorobenzene	<0.00283		0.00283	0.000443	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,2-Dichloroethane	<0.00283		0.00283	0.000284	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,2-Dichloropropane	<0.00283		0.00283	0.00283	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,3,5-Trimethylbenzene	<0.00283		0.00283	0.000364	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,3-Dichlorobenzene	<0.00283		0.00283	0.000291	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,3-Dichloropropane	<0.00283		0.00283	0.000340	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,4-Dichlorobenzene	<0.00283		0.00283	0.000792	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
1,4-Dioxane	<0.283		0.283	0.0273	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
2,2-Dichloropropane	<0.00283		0.00283	0.000962	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
2-Butanone (MEK)	<0.0283		0.0283	0.00207	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
2-Chlorotoluene	<0.00283		0.00283	0.000371	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
2-Hexanone	<0.0283		0.0283	0.00283	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
4-Chlorotoluene	<0.00283		0.00283	0.000668	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
4-Isopropyltoluene	<0.00283		0.00283	0.000454	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
4-Methyl-2-pentanone (MIBK)	<0.0283		0.0283	0.00186	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Acetone	0.0219	J	0.283	0.00477	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Benzene	<0.00283		0.00283	0.000277	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Bromobenzene	<0.00283		0.00283	0.000996	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Bromoform	<0.00283		0.00283	0.00283	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Bromomethane	<0.00566		0.00566	0.000509	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Carbon disulfide	<0.00283		0.00283	0.00283	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Carbon tetrachloride	<0.00283		0.00283	0.000548	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Chlorobenzene	<0.00283		0.00283	0.000747	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Chlorobromomethane	<0.00283		0.00283	0.000409	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-6 (4-5)

Lab Sample ID: 480-46783-10

Date Collected: 09/25/13 14:05

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 81.2

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	<0.00283		0.00283	0.000724	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Chloroethane	<0.00566		0.00566	0.00128	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Chloroform	<0.00283		0.00283	0.000350	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Chloromethane	<0.00566	*	0.00566	0.000342	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
cis-1,2-Dichloroethene	<0.00283		0.00283	0.000724	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
cis-1,3-Dichloropropene	<0.00283		0.00283	0.000815	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Dichlorobromomethane	<0.00283		0.00283	0.000758	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Dichlorodifluoromethane	<0.00566		0.00566	0.000467	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Ethyl ether	<0.00283		0.00283	0.00238	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Ethylbenzene	<0.00283		0.00283	0.000391	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Ethylene Dibromide	<0.00283		0.00283	0.000727	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Hexachlorobutadiene	<0.00283		0.00283	0.000663	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Isopropyl ether	<0.00283		0.00283	0.00283	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Isopropylbenzene	<0.00283		0.00283	0.000853	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Methyl tert-butyl ether	<0.00283		0.00283	0.000556	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Methylene Chloride	<0.00283		0.00283	0.00260	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
m-Xylene & p-Xylene	<0.00566		0.00566	0.000951	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Naphthalene	<0.0283		0.0283	0.000758	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
n-Butylbenzene	<0.00283		0.00283	0.000492	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
N-Propylbenzene	<0.00283		0.00283	0.000453	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
o-Xylene	<0.00283		0.00283	0.000739	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
sec-Butylbenzene	<0.00283		0.00283	0.000492	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Styrene	<0.00283		0.00283	0.000283	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Tert-amyl methyl ether	<0.00283		0.00283	0.00145	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Tert-butyl ethyl ether	<0.00283		0.00283	0.00249	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
tert-Butylbenzene	<0.00283		0.00283	0.000589	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Tetrachloroethene	<0.00283	*	0.00283	0.000759	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Tetrahydrofuran	<0.0566		0.0566	0.00521	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Toluene	<0.00283		0.00283	0.000428	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
trans-1,2-Dichloroethene	<0.00283		0.00283	0.000584	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
trans-1,3-Dichloropropene	<0.00283		0.00283	0.00249	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Trichloroethene	<0.00283		0.00283	0.00125	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Trichlorofluoromethane	<0.00566		0.00566	0.000535	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Vinyl chloride	<0.00283		0.00283	0.000690	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Dibromomethane	<0.00283		0.00283	0.000583	mg/Kg	☼	10/01/13 11:37	10/01/13 19:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		70 - 130				10/01/13 11:37	10/01/13 19:47	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 130				10/01/13 11:37	10/01/13 19:47	1
4-Bromofluorobenzene (Surr)	115		70 - 130				10/01/13 11:37	10/01/13 19:47	1

Client Sample ID: WCSB-6 (8-9)

Lab Sample ID: 480-46783-11

Date Collected: 09/25/13 14:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 78.8

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00262		0.00262	0.000525	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,1,1-Trichloroethane	<0.00262		0.00262	0.000381	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,1,2,2-Tetrachloroethane	<0.00262		0.00262	0.000851	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-6 (8-9)

Lab Sample ID: 480-46783-11

Date Collected: 09/25/13 14:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 78.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<0.00262		0.00262	0.000682	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,1-Dichloroethane	<0.00262		0.00262	0.000640	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,1-Dichloroethene	<0.00262		0.00262	0.000642	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,1-Dichloropropene	<0.00262		0.00262	0.000745	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,2,3-Trichlorobenzene	<0.00262		0.00262	0.000557	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,2,3-Trichloropropane	<0.00262		0.00262	0.000534	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,2,4-Trichlorobenzene	<0.00262		0.00262	0.000319	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,2,4-Trimethylbenzene	<0.00262		0.00262	0.00101	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,2-Dibromo-3-Chloropropane	<0.0262		0.0262	0.00262	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,2-Dichlorobenzene	<0.00262		0.00262	0.000410	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,2-Dichloroethane	<0.00262		0.00262	0.000263	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,2-Dichloropropane	<0.00262		0.00262	0.00262	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,3,5-Trimethylbenzene	<0.00262		0.00262	0.000338	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,3-Dichlorobenzene	<0.00262		0.00262	0.000270	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,3-Dichloropropane	<0.00262		0.00262	0.000315	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,4-Dichlorobenzene	<0.00262		0.00262	0.000735	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
1,4-Dioxane	<0.262		0.262	0.0253	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
2,2-Dichloropropane	<0.00262		0.00262	0.000892	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
2-Butanone (MEK)	0.0204	J	0.0262	0.00192	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
2-Chlorotoluene	<0.00262		0.00262	0.000344	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
2-Hexanone	<0.0262		0.0262	0.00262	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
4-Chlorotoluene	<0.00262		0.00262	0.000619	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
4-Isopropyltoluene	<0.00262		0.00262	0.000421	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
4-Methyl-2-pentanone (MIBK)	<0.0262		0.0262	0.00172	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Acetone	0.0704	J	0.262	0.00442	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Benzene	0.00268		0.00262	0.000257	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Bromobenzene	<0.00262		0.00262	0.000924	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Bromoform	<0.00262		0.00262	0.00262	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Bromomethane	<0.00525		0.00525	0.000472	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Carbon disulfide	0.00563		0.00262	0.00262	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Carbon tetrachloride	<0.00262		0.00262	0.000508	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Chlorobenzene	<0.00262		0.00262	0.000693	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Chlorobromomethane	<0.00262		0.00262	0.000379	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Chlorodibromomethane	<0.00262		0.00262	0.000672	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Chloroethane	<0.00525		0.00525	0.00119	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Chloroform	<0.00262		0.00262	0.000324	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Chloromethane	<0.00525	*	0.00525	0.000317	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
cis-1,2-Dichloroethene	<0.00262		0.00262	0.000672	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
cis-1,3-Dichloropropene	<0.00262		0.00262	0.000756	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Dichlorobromomethane	<0.00262		0.00262	0.000703	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Dichlorodifluoromethane	<0.00525		0.00525	0.000433	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Ethyl ether	<0.00262		0.00262	0.00220	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Ethylbenzene	0.00115	J	0.00262	0.000362	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Ethylene Dibromide	<0.00262		0.00262	0.000674	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Hexachlorobutadiene	<0.00262		0.00262	0.000615	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Isopropyl ether	<0.00262		0.00262	0.00262	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Isopropylbenzene	<0.00262		0.00262	0.000791	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Methyl tert-butyl ether	<0.00262		0.00262	0.000515	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Methylene Chloride	<0.00262		0.00262	0.00241	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-6 (8-9)

Lab Sample ID: 480-46783-11

Date Collected: 09/25/13 14:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 78.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00525		0.00525	0.000882	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Naphthalene	<0.0262		0.0262	0.000703	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
n-Butylbenzene	<0.00262		0.00262	0.000457	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
N-Propylbenzene	<0.00262		0.00262	0.000420	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
o-Xylene	<0.00262		0.00262	0.000685	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
sec-Butylbenzene	<0.00262		0.00262	0.000457	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Styrene	<0.00262		0.00262	0.000262	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Tert-amyl methyl ether	<0.00262		0.00262	0.00134	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Tert-butyl ethyl ether	<0.00262		0.00262	0.00231	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
tert-Butylbenzene	<0.00262		0.00262	0.000546	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Tetrachloroethene	<0.00262	*	0.00262	0.000704	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Tetrahydrofuran	<0.0525		0.0525	0.00483	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Toluene	0.00326		0.00262	0.000397	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
trans-1,2-Dichloroethene	<0.00262		0.00262	0.000542	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
trans-1,3-Dichloropropene	<0.00262		0.00262	0.00231	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Trichloroethene	<0.00262		0.00262	0.00115	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Trichlorofluoromethane	<0.00525		0.00525	0.000496	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Vinyl chloride	<0.00262		0.00262	0.000640	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1
Dibromomethane	<0.00262		0.00262	0.000540	mg/Kg	☼	10/01/13 11:37	10/01/13 20:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		70 - 130	10/01/13 11:37	10/01/13 20:12	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	10/01/13 11:37	10/01/13 20:12	1
4-Bromofluorobenzene (Surr)	112		70 - 130	10/01/13 11:37	10/01/13 20:12	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	2.27		0.317	0.0127	mg/Kg	☼		10/07/13 11:24	1
C9-C12 Aliphatics (adjusted)	0.0351	J	0.317	0.0127	mg/Kg	☼		10/07/13 11:24	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	1.94	B	0.261	0.0104	mg/Kg	☼	10/01/13 12:20	10/03/13 13:37	1
C9-C10 Aromatics	0.251	J	0.261	0.0104	mg/Kg	☼	10/01/13 12:20	10/03/13 13:37	1
C9-C12 Aliphatics (unadjusted)	0.317	B	0.261	0.0104	mg/Kg	☼	10/01/13 12:20	10/03/13 13:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	86		70 - 130	10/01/13 12:20	10/03/13 13:37	1
2,5-Dibromotoluene (pid)	88		70 - 130	10/01/13 12:20	10/03/13 13:37	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	3.18	J	6.13	2.45	mg/Kg	☼	09/30/13 14:30	10/02/13 15:50	1
C19-C36 Aliphatics	5.49	J	6.13	2.45	mg/Kg	☼	09/30/13 14:30	10/02/13 15:50	1
C9-C18 Aliphatics	<6.13		6.13	2.45	mg/Kg	☼	09/30/13 14:30	10/02/13 15:50	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<6.35		6.35	6.35	mg/Kg	☼		10/04/13 10:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	70		40 - 140	09/30/13 14:30	10/02/13 15:50	1
2-Bromonaphthalene	98		40 - 140	09/30/13 14:30	10/02/13 15:50	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-6 (8-9)

Date Collected: 09/25/13 14:15

Date Received: 09/28/13 01:00

Lab Sample ID: 480-46783-11

Matrix: Solid

Percent Solids: 78.8

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	111		40 - 140	09/30/13 14:30	10/02/13 15:50	1
o-Terphenyl	86		40 - 140	09/30/13 14:30	10/02/13 15:50	1

Client Sample ID: WCSB-5 (0.5-1.5)

Date Collected: 09/25/13 15:15

Date Received: 09/28/13 01:00

Lab Sample ID: 480-46783-12

Matrix: Solid

Percent Solids: 91.3

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.28		1.28	0.256	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,1,1-Trichloroethane	<1.28		1.28	0.186	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,1,2,2-Tetrachloroethane	<1.28		1.28	0.415	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,1,2-Trichloroethane	<1.28		1.28	0.333	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,1-Dichloroethane	<1.28		1.28	0.312	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,1-Dichloroethene	<1.28		1.28	0.313	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,1-Dichloropropene	<1.28		1.28	0.363	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,2,3-Trichlorobenzene	<1.28		1.28	0.272	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,2,3-Trichloropropane	<1.28		1.28	0.261	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,2,4-Trichlorobenzene	3.23		1.28	0.156	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,2,4-Trimethylbenzene	<1.28		1.28	0.491	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,2-Dibromo-3-Chloropropane	<12.8		12.8	1.28	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,2-Dichlorobenzene	2.06		1.28	0.200	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,2-Dichloroethane	<1.28		1.28	0.128	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,2-Dichloropropane	<1.28		1.28	1.28	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,3,5-Trimethylbenzene	<1.28		1.28	0.165	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,3-Dichlorobenzene	22.7		1.28	0.132	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,3-Dichloropropane	<1.28		1.28	0.154	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,4-Dichlorobenzene	27.5		1.28	0.358	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
1,4-Dioxane	<128 *		128	12.3	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
2,2-Dichloropropane	<1.28		1.28	0.435	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
2-Butanone (MEK)	<12.8 *		12.8	0.937	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
2-Chlorotoluene	<1.28		1.28	0.168	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
2-Hexanone	<12.8		12.8	1.28	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
4-Chlorotoluene	<1.28		1.28	0.302	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
4-Isopropyltoluene	<1.28		1.28	0.205	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
4-Methyl-2-pentanone (MIBK)	<12.8		12.8	0.839	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Acetone	<128		128	2.16	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Benzene	0.430 J		1.28	0.125	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Bromobenzene	<1.28		1.28	0.450	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Bromoform	<1.28		1.28	1.28	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Bromomethane	<2.56		2.56	0.230	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Carbon disulfide	<1.28		1.28	1.28	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Carbon tetrachloride	<1.28		1.28	0.248	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Chlorobromomethane	<1.28		1.28	0.185	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Chlorodibromomethane	<1.28		1.28	0.328	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Chloroethane	<2.56		2.56	0.578	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Chloroform	<1.28		1.28	0.158	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Chloromethane	<2.56		2.56	0.155	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
cis-1,2-Dichloroethene	<1.28		1.28	0.328	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-5 (0.5-1.5)

Lab Sample ID: 480-46783-12

Date Collected: 09/25/13 15:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 91.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	<1.28		1.28	0.369	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Dichlorobromomethane	<1.28		1.28	0.343	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Dichlorodifluoromethane	<2.56	*	2.56	0.211	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Ethyl ether	<1.28		1.28	1.07	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Ethylbenzene	<1.28		1.28	0.177	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Ethylene Dibromide	<1.28		1.28	0.329	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Hexachlorobutadiene	<1.28		1.28	0.300	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Isopropyl ether	<1.28		1.28	1.28	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Isopropylbenzene	<1.28		1.28	0.386	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Methyl tert-butyl ether	<1.28		1.28	0.251	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Methylene Chloride	<1.28		1.28	1.18	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
m-Xylene & p-Xylene	<2.56		2.56	0.430	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Naphthalene	5.90	J	12.8	0.343	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
n-Butylbenzene	<1.28		1.28	0.223	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
N-Propylbenzene	<1.28		1.28	0.205	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
o-Xylene	<1.28		1.28	0.334	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
sec-Butylbenzene	<1.28		1.28	0.223	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Styrene	<1.28		1.28	0.128	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Tert-amyl methyl ether	<1.28		1.28	0.655	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Tert-butyl ethyl ether	<1.28		1.28	1.13	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
tert-Butylbenzene	<1.28		1.28	0.266	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Tetrachloroethene	<1.28		1.28	0.343	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Tetrahydrofuran	<25.6		25.6	2.35	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Toluene	<1.28		1.28	0.193	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
trans-1,2-Dichloroethene	<1.28		1.28	0.264	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
trans-1,3-Dichloropropene	<1.28		1.28	1.13	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Trichloroethene	<1.28		1.28	0.563	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Trichlorofluoromethane	<2.56		2.56	0.242	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Vinyl chloride	<1.28		1.28	0.312	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10
Dibromomethane	<1.28		1.28	0.264	mg/Kg	☼	10/03/13 12:44	10/03/13 20:38	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		70 - 130	10/03/13 12:44	10/03/13 20:38	10
1,2-Dichloroethane-d4 (Surr)	97		70 - 130	10/03/13 12:44	10/03/13 20:38	10
4-Bromofluorobenzene (Surr)	100		70 - 130	10/03/13 12:44	10/03/13 20:38	10

Method: 8260C - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	95.0		6.40	1.69	mg/Kg	☼	10/03/13 12:44	10/04/13 17:27	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130	10/03/13 12:44	10/04/13 17:27	50
1,2-Dichloroethane-d4 (Surr)	98		70 - 130	10/03/13 12:44	10/04/13 17:27	50
4-Bromofluorobenzene (Surr)	100		70 - 130	10/03/13 12:44	10/04/13 17:27	50

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<362		362	230	mg/Kg	☼	10/01/13 09:24	10/03/13 21:52	10000
PCB-1221	<362		362	175	mg/Kg	☼	10/01/13 09:24	10/03/13 21:52	10000
PCB-1232	<362		362	153	mg/Kg	☼	10/01/13 09:24	10/03/13 21:52	10000

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-5 (0.5-1.5)

Lab Sample ID: 480-46783-12

Date Collected: 09/25/13 15:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 91.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	<362		362	142	mg/Kg	☼	10/01/13 09:24	10/03/13 21:52	10000
PCB-1248	<362		362	186	mg/Kg	☼	10/01/13 09:24	10/03/13 21:52	10000
PCB-1254	<362		362	186	mg/Kg	☼	10/01/13 09:24	10/03/13 21:52	10000
PCB-1260	1040		362	186	mg/Kg	☼	10/01/13 09:24	10/03/13 21:52	10000
PCB-1262	<362		362	296	mg/Kg	☼	10/01/13 09:24	10/03/13 21:52	10000
PCB-1268	<362		362	153	mg/Kg	☼	10/01/13 09:24	10/03/13 21:52	10000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	10/01/13 09:24	10/03/13 21:52	10000
Tetrachloro-m-xylene	0	X	30 - 150	10/01/13 09:24	10/03/13 21:52	10000
DCB Decachlorobiphenyl	0	X	30 - 150	10/01/13 09:24	10/03/13 21:52	10000
DCB Decachlorobiphenyl	0	X	30 - 150	10/01/13 09:24	10/03/13 21:52	10000

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	2070		5.14	2.05	mg/Kg	☼	09/30/13 14:30	10/02/13 16:20	1
C19-C36 Aliphatics	9730		5.14	2.05	mg/Kg	☼	09/30/13 14:30	10/02/13 16:20	1
C9-C18 Aliphatics	6890	B	5.14	2.05	mg/Kg	☼	09/30/13 14:30	10/02/13 16:20	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	1870		5.48	5.48	mg/Kg	☼		10/04/13 10:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	0	X	40 - 140	09/30/13 14:30	10/02/13 16:20	1
2-Bromonaphthalene	78		40 - 140	09/30/13 14:30	10/02/13 16:20	1
2-Fluorobiphenyl	107		40 - 140	09/30/13 14:30	10/02/13 16:20	1
o-Terphenyl	84		40 - 140	09/30/13 14:30	10/02/13 16:20	1

Client Sample ID: WCSB-5 (5-6)

Lab Sample ID: 480-46783-13

Date Collected: 09/25/13 15:25

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 73.8

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.37		1.37	0.274	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,1,1-Trichloroethane	<1.37		1.37	0.199	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,1,2,2-Tetrachloroethane	<1.37		1.37	0.445	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,1,2-Trichloroethane	<1.37		1.37	0.356	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,1-Dichloroethane	<1.37		1.37	0.335	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,1-Dichloroethene	<1.37		1.37	0.336	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,1-Dichloropropene	<1.37		1.37	0.389	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,2,3-Trichlorobenzene	<1.37		1.37	0.291	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,2,3-Trichloropropane	<1.37		1.37	0.279	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,2,4-Trichlorobenzene	2.45		1.37	0.167	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,2,4-Trimethylbenzene	<1.37		1.37	0.526	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,2-Dibromo-3-Chloropropane	<13.7		13.7	1.37	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,2-Dichlorobenzene	2.10		1.37	0.214	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,2-Dichloroethane	<1.37		1.37	0.138	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,2-Dichloropropane	<1.37		1.37	1.37	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,3,5-Trimethylbenzene	<1.37		1.37	0.177	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,3-Dichlorobenzene	15.8		1.37	0.141	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-5 (5-6)

Lab Sample ID: 480-46783-13

Date Collected: 09/25/13 15:25

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 73.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	<1.37		1.37	0.165	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,4-Dichlorobenzene	24.2		1.37	0.384	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
1,4-Dioxane	<137	*	137	13.2	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
2,2-Dichloropropane	<1.37		1.37	0.466	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
2-Butanone (MEK)	<13.7	*	13.7	1.00	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
2-Chlorotoluene	<1.37		1.37	0.180	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
2-Hexanone	<13.7		13.7	1.37	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
4-Chlorotoluene	<1.37		1.37	0.324	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
4-Isopropyltoluene	<1.37		1.37	0.220	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
4-Methyl-2-pentanone (MIBK)	<13.7		13.7	0.899	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Acetone	<137		137	2.31	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Benzene	0.526	J	1.37	0.134	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Bromobenzene	<1.37		1.37	0.483	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Bromoform	<1.37		1.37	1.37	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Bromomethane	<2.74		2.74	0.247	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Carbon disulfide	<1.37		1.37	1.37	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Carbon tetrachloride	<1.37		1.37	0.265	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Chlorobromomethane	<1.37		1.37	0.198	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Chlorodibromomethane	<1.37		1.37	0.351	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Chloroethane	<2.74		2.74	0.620	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Chloroform	<1.37		1.37	0.169	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Chloromethane	<2.74		2.74	0.166	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
cis-1,2-Dichloroethene	<1.37		1.37	0.351	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
cis-1,3-Dichloropropene	<1.37		1.37	0.395	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Dichlorobromomethane	<1.37		1.37	0.367	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Dichlorodifluoromethane	<2.74	*	2.74	0.226	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Ethyl ether	<1.37		1.37	1.15	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Ethylbenzene	<1.37		1.37	0.189	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Ethylene Dibromide	<1.37		1.37	0.352	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Hexachlorobutadiene	<1.37		1.37	0.321	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Isopropyl ether	<1.37		1.37	1.37	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Isopropylbenzene	<1.37		1.37	0.413	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Methyl tert-butyl ether	<1.37		1.37	0.269	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Methylene Chloride	<1.37		1.37	1.26	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
m-Xylene & p-Xylene	<2.74		2.74	0.461	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Naphthalene	1.16	J	13.7	0.367	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
n-Butylbenzene	<1.37		1.37	0.239	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
N-Propylbenzene	<1.37		1.37	0.219	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
o-Xylene	<1.37		1.37	0.358	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
sec-Butylbenzene	<1.37		1.37	0.239	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Styrene	<1.37		1.37	0.137	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Tert-amyl methyl ether	<1.37		1.37	0.702	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Tert-butyl ethyl ether	<1.37		1.37	1.21	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
tert-Butylbenzene	<1.37		1.37	0.285	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Tetrachloroethene	<1.37		1.37	0.368	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Tetrahydrofuran	<27.4		27.4	2.52	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Toluene	<1.37		1.37	0.207	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
trans-1,2-Dichloroethene	<1.37		1.37	0.283	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
trans-1,3-Dichloropropene	<1.37		1.37	1.21	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-5 (5-6)

Lab Sample ID: 480-46783-13

Date Collected: 09/25/13 15:25

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 73.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<1.37		1.37	0.603	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Trichlorofluoromethane	<2.74		2.74	0.259	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Vinyl chloride	<1.37		1.37	0.335	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Dibromomethane	<1.37		1.37	0.282	mg/Kg	☼	10/03/13 12:44	10/03/13 21:03	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	94		70 - 130				10/03/13 12:44	10/03/13 21:03	10
1,2-Dichloroethane-d4 (Surr)	96		70 - 130				10/03/13 12:44	10/03/13 21:03	10
4-Bromofluorobenzene (Surr)	98		70 - 130				10/03/13 12:44	10/03/13 21:03	10

Method: 8260C - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	105		5.48	1.45	mg/Kg	☼	10/03/13 12:44	10/04/13 17:53	40
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130				10/03/13 12:44	10/04/13 17:53	40
1,2-Dichloroethane-d4 (Surr)	96		70 - 130				10/03/13 12:44	10/04/13 17:53	40
4-Bromofluorobenzene (Surr)	98		70 - 130				10/03/13 12:44	10/04/13 17:53	40

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	1.48	J	33.9	1.36	mg/Kg	☼		10/07/13 11:24	100
C9-C12 Aliphatics (adjusted)	<33.9		33.9	1.36	mg/Kg	☼		10/07/13 11:24	100

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	1.48	J	28.7	1.15	mg/Kg	☼	10/01/13 12:20	10/02/13 05:59	100
C9-C10 Aromatics	33.1		28.7	1.15	mg/Kg	☼	10/01/13 12:20	10/02/13 05:59	100
C9-C12 Aliphatics (unadjusted)	53.2		28.7	1.15	mg/Kg	☼	10/01/13 12:20	10/02/13 05:59	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	90		70 - 130				10/01/13 12:20	10/02/13 05:59	100
2,5-Dibromotoluene (pid)	93		70 - 130				10/01/13 12:20	10/02/13 05:59	100

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	1250		6.50	2.60	mg/Kg	☼	09/30/13 14:30	10/02/13 16:49	1
C19-C36 Aliphatics	3230		6.50	2.60	mg/Kg	☼	09/30/13 14:30	10/02/13 16:49	1
C9-C18 Aliphatics	2390	B	6.50	2.60	mg/Kg	☼	09/30/13 14:30	10/02/13 16:49	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	1150		6.78	6.78	mg/Kg	☼		10/04/13 10:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	84		40 - 140				09/30/13 14:30	10/02/13 16:49	1
2-Bromonaphthalene	106		40 - 140				09/30/13 14:30	10/02/13 16:49	1
2-Fluorobiphenyl	131		40 - 140				09/30/13 14:30	10/02/13 16:49	1
o-Terphenyl	87		40 - 140				09/30/13 14:30	10/02/13 16:49	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-5 (2.5-3)

Lab Sample ID: 480-46783-14

Date Collected: 09/25/13 15:30

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 84.1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<19.8		19.8	12.6	mg/Kg	☼	10/01/13 09:24	10/04/13 17:06	500
PCB-1221	<19.8		19.8	9.61	mg/Kg	☼	10/01/13 09:24	10/04/13 17:06	500
PCB-1232	<19.8		19.8	8.41	mg/Kg	☼	10/01/13 09:24	10/04/13 17:06	500
PCB-1242	<19.8		19.8	7.81	mg/Kg	☼	10/01/13 09:24	10/04/13 17:06	500
PCB-1248	<19.8		19.8	10.2	mg/Kg	☼	10/01/13 09:24	10/04/13 17:06	500
PCB-1254	<19.8		19.8	10.2	mg/Kg	☼	10/01/13 09:24	10/04/13 17:06	500
PCB-1260	37.5		19.8	10.2	mg/Kg	☼	10/01/13 09:24	10/04/13 17:06	500
PCB-1262	<19.8		19.8	16.2	mg/Kg	☼	10/01/13 09:24	10/04/13 17:06	500
PCB-1268	<19.8		19.8	8.41	mg/Kg	☼	10/01/13 09:24	10/04/13 17:06	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				10/01/13 09:24	10/04/13 17:06	500
Tetrachloro-m-xylene	0	X	30 - 150				10/01/13 09:24	10/04/13 17:06	500
DCB Decachlorobiphenyl	0	X	30 - 150				10/01/13 09:24	10/04/13 17:06	500
DCB Decachlorobiphenyl	0	X	30 - 150				10/01/13 09:24	10/04/13 17:06	500

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.569		0.569	0.227	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1
Arsenic	5.39		1.14	0.455	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1
Barium	139		0.569	0.125	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1
Beryllium	1.43		0.227	0.0318	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1
Cadmium	0.603	^	0.227	0.0341	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1
Chromium	12.0		0.569	0.227	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1
Nickel	7.12		1.14	0.262	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1
Thallium	<1.14		1.14	0.341	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1
Vanadium	12.6		0.569	0.125	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1
Zinc	181	B	2.84	0.174	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1
Lead	295		0.569	0.273	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1
Selenium	0.847	^	0.569	0.455	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1
Antimony	<0.569	^	0.569	0.455	mg/Kg	☼	09/30/13 14:10	10/01/13 20:08	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.550		0.110	0.00887	mg/Kg	☼	09/30/13 10:40	09/30/13 12:14	1

Client Sample ID: TB-09252013

Lab Sample ID: 480-46783-15

Date Collected: 09/25/13 12:00

Matrix: Solid

Date Received: 09/28/13 01:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0658		0.0658	0.0132	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,1,1-Trichloroethane	<0.0658		0.0658	0.00955	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,1,2,2-Tetrachloroethane	<0.0658		0.0658	0.0213	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,1,2-Trichloroethane	<0.0658		0.0658	0.0171	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,1-Dichloroethane	<0.0658		0.0658	0.0161	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,1-Dichloroethene	<0.0658		0.0658	0.0161	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,1-Dichloropropene	<0.0658		0.0658	0.0187	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,2,3-Trichlorobenzene	<0.0658		0.0658	0.0140	mg/Kg		10/02/13 11:15	10/02/13 18:28	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: TB-09252013

Lab Sample ID: 480-46783-15

Date Collected: 09/25/13 12:00

Matrix: Solid

Date Received: 09/28/13 01:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<0.0658		0.0658	0.0134	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,2,4-Trichlorobenzene	<0.0658		0.0658	0.00800	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,2,4-Trimethylbenzene	<0.0658		0.0658	0.0253	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,2-Dibromo-3-Chloropropane	<0.658		0.658	0.0658	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,2-Dichlorobenzene	<0.0658		0.0658	0.0103	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,2-Dichloroethane	<0.0658		0.0658	0.00661	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,2-Dichloropropane	<0.0658		0.0658	0.0658	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,3,5-Trimethylbenzene	<0.0658		0.0658	0.00847	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,3-Dichlorobenzene	<0.0658		0.0658	0.00676	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,3-Dichloropropane	<0.0658		0.0658	0.00789	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,4-Dichlorobenzene	<0.0658		0.0658	0.0184	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
1,4-Dioxane	<6.58		6.58	0.634	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
2,2-Dichloropropane	<0.0658		0.0658	0.0224	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
2-Butanone (MEK)	<0.658	*	0.658	0.0482	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
2-Chlorotoluene	<0.0658		0.0658	0.00863	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
2-Hexanone	<0.658		0.658	0.0658	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
4-Chlorotoluene	<0.0658		0.0658	0.0155	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
4-Isopropyltoluene	<0.0658		0.0658	0.0106	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
4-Methyl-2-pentanone (MIBK)	<0.658		0.658	0.0432	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Acetone	<6.58		6.58	0.111	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Benzene	<0.0658		0.0658	0.00645	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Bromobenzene	<0.0658		0.0658	0.0232	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Bromoform	<0.0658		0.0658	0.0658	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Bromomethane	<0.132		0.132	0.0118	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Carbon disulfide	<0.0658		0.0658	0.0658	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Carbon tetrachloride	<0.0658		0.0658	0.0127	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Chlorobenzene	<0.0658		0.0658	0.0174	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Chlorobromomethane	<0.0658		0.0658	0.00950	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Chlorodibromomethane	<0.0658		0.0658	0.0168	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Chloroethane	<0.132		0.132	0.0297	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Chloroform	<0.0658		0.0658	0.00813	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Chloromethane	<0.132		0.132	0.00795	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
cis-1,2-Dichloroethene	<0.0658		0.0658	0.0168	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
cis-1,3-Dichloropropene	<0.0658		0.0658	0.0189	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Dichlorobromomethane	<0.0658		0.0658	0.0176	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Dichlorodifluoromethane	<0.132		0.132	0.0109	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Ethyl ether	<0.0658		0.0658	0.0553	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Ethylbenzene	<0.0658		0.0658	0.00908	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Ethylene Dibromide	<0.0658		0.0658	0.0169	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Hexachlorobutadiene	<0.0658		0.0658	0.0154	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Isopropyl ether	<0.0658		0.0658	0.0658	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Isopropylbenzene	<0.0658		0.0658	0.0198	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Methyl tert-butyl ether	<0.0658		0.0658	0.0129	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Methylene Chloride	<0.0658		0.0658	0.0605	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
m-Xylene & p-Xylene	<0.132		0.132	0.0221	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Naphthalene	<0.658		0.658	0.0176	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
n-Butylbenzene	<0.0658		0.0658	0.0114	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
N-Propylbenzene	<0.0658		0.0658	0.0105	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
o-Xylene	<0.0658		0.0658	0.0172	mg/Kg		10/02/13 11:15	10/02/13 18:28	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: TB-09252013

Lab Sample ID: 480-46783-15

Date Collected: 09/25/13 12:00

Matrix: Solid

Date Received: 09/28/13 01:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<0.0658		0.0658	0.0114	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Styrene	<0.0658		0.0658	0.00658	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Tert-amyl methyl ether	<0.0658		0.0658	0.0337	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Tert-butyl ethyl ether	<0.0658		0.0658	0.0579	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
tert-Butylbenzene	<0.0658		0.0658	0.0137	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Tetrachloroethene	<0.0658		0.0658	0.0177	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Tetrahydrofuran	<1.32		1.32	0.121	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Toluene	<0.0658		0.0658	0.00995	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
trans-1,2-Dichloroethene	<0.0658		0.0658	0.0136	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
trans-1,3-Dichloropropene	<0.0658		0.0658	0.0579	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Trichloroethene	<0.0658		0.0658	0.0289	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Trichlorofluoromethane	<0.132		0.132	0.0124	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Vinyl chloride	<0.0658		0.0658	0.0161	mg/Kg		10/02/13 11:15	10/02/13 18:28	1
Dibromomethane	<0.0658		0.0658	0.0136	mg/Kg		10/02/13 11:15	10/02/13 18:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130	10/02/13 11:15	10/02/13 18:28	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	10/02/13 11:15	10/02/13 18:28	1
4-Bromofluorobenzene (Surr)	98		70 - 130	10/02/13 11:15	10/02/13 18:28	1

Client Sample ID: WCSB-4 (2.5-3)

Lab Sample ID: 480-46783-16

Date Collected: 09/26/13 07:45

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 78.0

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.117		0.117	0.0234	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,1,1-Trichloroethane	<0.117		0.117	0.0170	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,1,2,2-Tetrachloroethane	<0.117		0.117	0.0380	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,1,2-Trichloroethane	<0.117		0.117	0.0305	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,1-Dichloroethane	<0.117		0.117	0.0286	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,1-Dichloroethene	<0.117		0.117	0.0287	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,1-Dichloropropene	<0.117		0.117	0.0333	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,2,3-Trichlorobenzene	0.0310	J	0.117	0.0249	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,2,3-Trichloropropane	<0.117		0.117	0.0238	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,2,4-Trichlorobenzene	0.0497	J	0.117	0.0142	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,2,4-Trimethylbenzene	0.0553	J	0.117	0.0450	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,2-Dibromo-3-Chloropropane	<1.17		1.17	0.117	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,2-Dichlorobenzene	<0.117		0.117	0.0183	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,2-Dichloroethane	<0.117		0.117	0.0118	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,2-Dichloropropane	<0.117		0.117	0.117	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,3,5-Trimethylbenzene	<0.117		0.117	0.0151	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,3-Dichlorobenzene	<0.117		0.117	0.0120	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,3-Dichloropropane	<0.117		0.117	0.0141	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,4-Dichlorobenzene	<0.117		0.117	0.0328	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
1,4-Dioxane	<11.7		11.7	1.13	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
2,2-Dichloropropane	<0.117		0.117	0.0398	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
2-Butanone (MEK)	<1.17	*	1.17	0.0857	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
2-Chlorotoluene	<0.117		0.117	0.0154	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
2-Hexanone	<1.17		1.17	0.117	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-4 (2.5-3)

Lab Sample ID: 480-46783-16

Date Collected: 09/26/13 07:45

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 78.0

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorotoluene	<0.117		0.117	0.0276	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
4-Isopropyltoluene	<0.117		0.117	0.0188	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
4-Methyl-2-pentanone (MIBK)	<1.17		1.17	0.0768	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Acetone	<11.7		11.7	0.197	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Benzene	0.0468	J	0.117	0.0115	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Bromobenzene	<0.117		0.117	0.0412	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Bromoform	<0.117		0.117	0.117	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Bromomethane	<0.234		0.234	0.0211	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Carbon disulfide	<0.117		0.117	0.117	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Carbon tetrachloride	<0.117		0.117	0.0227	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Chlorobenzene	<0.117		0.117	0.0309	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Chlorobromomethane	<0.117		0.117	0.0169	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Chlorodibromomethane	<0.117		0.117	0.0300	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Chloroethane	<0.234		0.234	0.0529	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Chloroform	<0.117		0.117	0.0145	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Chloromethane	<0.234		0.234	0.0141	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
cis-1,2-Dichloroethene	<0.117		0.117	0.0300	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
cis-1,3-Dichloropropene	<0.117		0.117	0.0337	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Dichlorobromomethane	<0.117		0.117	0.0314	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Dichlorodifluoromethane	<0.234	*	0.234	0.0193	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Ethyl ether	<0.117		0.117	0.0984	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Ethylbenzene	0.124		0.117	0.0162	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Ethylene Dibromide	<0.117		0.117	0.0301	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Hexachlorobutadiene	<0.117		0.117	0.0275	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Isopropyl ether	<0.117		0.117	0.117	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Isopropylbenzene	<0.117		0.117	0.0353	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Methyl tert-butyl ether	<0.117		0.117	0.0230	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Methylene Chloride	<0.117		0.117	0.108	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
m-Xylene & p-Xylene	0.110	J	0.234	0.0394	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Naphthalene	0.0757	J	1.17	0.0314	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
n-Butylbenzene	0.124		0.117	0.0204	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
N-Propylbenzene	0.136		0.117	0.0187	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
o-Xylene	0.0409	J	0.117	0.0306	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
sec-Butylbenzene	<0.117		0.117	0.0204	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Styrene	<0.117		0.117	0.0117	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Tert-amyl methyl ether	<0.117		0.117	0.0600	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Tert-butyl ethyl ether	<0.117		0.117	0.103	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
tert-Butylbenzene	<0.117		0.117	0.0244	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Tetrachloroethene	<0.117		0.117	0.0314	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Tetrahydrofuran	6.67		2.34	0.216	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Toluene	0.0474	J	0.117	0.0177	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
trans-1,2-Dichloroethene	<0.117		0.117	0.0242	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
trans-1,3-Dichloropropene	<0.117		0.117	0.103	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Trichloroethene	<0.117		0.117	0.0515	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Trichlorofluoromethane	<0.234		0.234	0.0222	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Vinyl chloride	<0.117		0.117	0.0286	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1
Dibromomethane	<0.117		0.117	0.0241	mg/Kg	☼	10/03/13 12:52	10/04/13 18:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	86		70 - 130	10/03/13 12:52	10/04/13 18:18	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-4 (2.5-3)

Lab Sample ID: 480-46783-16

Date Collected: 09/26/13 07:45

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 78.0

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	119		70 - 130	10/03/13 12:52	10/04/13 18:18	1
4-Bromofluorobenzene (Surr)	92		70 - 130	10/03/13 12:52	10/04/13 18:18	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	79.6		3.21	0.128	mg/Kg	☼		10/07/13 11:24	10
C9-C12 Aliphatics (adjusted)	50.7		3.21	0.128	mg/Kg	☼		10/07/13 11:24	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	82.0	B	3.09	0.124	mg/Kg	☼	10/01/13 12:20	10/02/13 17:34	10
C9-C10 Aromatics	13.6		3.09	0.124	mg/Kg	☼	10/01/13 12:20	10/02/13 17:34	10
C9-C12 Aliphatics (unadjusted)	66.3	B	3.09	0.124	mg/Kg	☼	10/01/13 12:20	10/02/13 17:34	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	93		70 - 130	10/01/13 12:20	10/02/13 17:34	10
2,5-Dibromotoluene (pid)	93		70 - 130	10/01/13 12:20	10/02/13 17:34	10

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0416		0.0416	0.0265	mg/Kg	☼	10/01/13 09:24	10/03/13 22:22	1
PCB-1221	<0.0416		0.0416	0.0202	mg/Kg	☼	10/01/13 09:24	10/03/13 22:22	1
PCB-1232	<0.0416		0.0416	0.0177	mg/Kg	☼	10/01/13 09:24	10/03/13 22:22	1
PCB-1242	<0.0416		0.0416	0.0164	mg/Kg	☼	10/01/13 09:24	10/03/13 22:22	1
PCB-1248	<0.0416		0.0416	0.0214	mg/Kg	☼	10/01/13 09:24	10/03/13 22:22	1
PCB-1254	<0.0416		0.0416	0.0214	mg/Kg	☼	10/01/13 09:24	10/03/13 22:22	1
PCB-1260	0.122		0.0416	0.0214	mg/Kg	☼	10/01/13 09:24	10/03/13 22:22	1
PCB-1262	<0.0416		0.0416	0.0341	mg/Kg	☼	10/01/13 09:24	10/03/13 22:22	1
PCB-1268	<0.0416		0.0416	0.0177	mg/Kg	☼	10/01/13 09:24	10/03/13 22:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	62		30 - 150	10/01/13 09:24	10/03/13 22:22	1
Tetrachloro-m-xylene	75		30 - 150	10/01/13 09:24	10/03/13 22:22	1
DCB Decachlorobiphenyl	66		30 - 150	10/01/13 09:24	10/03/13 22:22	1
DCB Decachlorobiphenyl	78		30 - 150	10/01/13 09:24	10/03/13 22:22	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	5.57	J	5.90	2.36	mg/Kg	☼	09/30/13 14:30	10/02/13 17:48	1
C19-C36 Aliphatics	23.6		5.90	2.36	mg/Kg	☼	09/30/13 14:30	10/02/13 17:48	1
C9-C18 Aliphatics	2.50	J B	5.90	2.36	mg/Kg	☼	09/30/13 14:30	10/02/13 17:48	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<6.41		6.41	6.41	mg/Kg	☼		10/04/13 10:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	77		40 - 140	09/30/13 14:30	10/02/13 17:48	1
2-Bromonaphthalene	99		40 - 140	09/30/13 14:30	10/02/13 17:48	1
2-Fluorobiphenyl	114		40 - 140	09/30/13 14:30	10/02/13 17:48	1
o-Terphenyl	90		40 - 140	09/30/13 14:30	10/02/13 17:48	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-4 (2.5-3)

Lab Sample ID: 480-46783-16

Date Collected: 09/26/13 07:45

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 78.0

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.596		0.596	0.238	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1
Arsenic	74.1		1.19	0.477	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1
Barium	24.9		0.596	0.131	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1
Beryllium	0.198	J	0.238	0.0334	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1
Cadmium	1.57	^	0.238	0.0358	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1
Chromium	98.0		0.596	0.238	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1
Nickel	129		1.19	0.274	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1
Thallium	<1.19		1.19	0.358	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1
Vanadium	215		0.596	0.131	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1
Zinc	369	B	2.98	0.182	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1
Lead	274		0.596	0.286	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1
Selenium	3.66	^	0.596	0.477	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1
Antimony	3.49	^	0.596	0.477	mg/Kg	☼	09/30/13 14:10	10/01/13 20:10	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0760	J	0.121	0.00982	mg/Kg	☼	09/30/13 10:40	09/30/13 12:15	1

Client Sample ID: WCSB-4 (6-7)

Lab Sample ID: 480-46783-17

Date Collected: 09/26/13 07:50

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 68.1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00281		0.00281	0.000562	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,1,1-Trichloroethane	<0.00281		0.00281	0.000408	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,1,2,2-Tetrachloroethane	<0.00281		0.00281	0.000912	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,1,2-Trichloroethane	<0.00281		0.00281	0.000731	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,1-Dichloroethane	<0.00281		0.00281	0.000686	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,1-Dichloroethene	<0.00281		0.00281	0.000688	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,1-Dichloropropene	<0.00281		0.00281	0.000799	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,2,3-Trichlorobenzene	<0.00281		0.00281	0.000597	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,2,3-Trichloropropane	<0.00281		0.00281	0.000573	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,2,4-Trichlorobenzene	<0.00281		0.00281	0.000342	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,2,4-Trimethylbenzene	<0.00281		0.00281	0.00108	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,2-Dibromo-3-Chloropropane	<0.0281		0.0281	0.00281	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,2-Dichlorobenzene	<0.00281		0.00281	0.000440	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,2-Dichloroethane	<0.00281		0.00281	0.000282	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,2-Dichloropropane	<0.00281		0.00281	0.00281	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,3,5-Trimethylbenzene	<0.00281		0.00281	0.000362	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,3-Dichlorobenzene	<0.00281		0.00281	0.000289	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,3-Dichloropropane	<0.00281		0.00281	0.000337	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,4-Dichlorobenzene	<0.00281		0.00281	0.000787	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
1,4-Dioxane	<0.281		0.281	0.0271	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
2,2-Dichloropropane	<0.00281		0.00281	0.000956	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
2-Butanone (MEK)	<0.0281		0.0281	0.00206	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
2-Chlorotoluene	<0.00281		0.00281	0.000369	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
2-Hexanone	<0.0281		0.0281	0.00281	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
4-Chlorotoluene	<0.00281		0.00281	0.000664	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
4-Isopropyltoluene	<0.00281		0.00281	0.000451	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-4 (6-7)

Lab Sample ID: 480-46783-17

Date Collected: 09/26/13 07:50

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 68.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	<0.0281		0.0281	0.00184	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Acetone	0.0966	J	0.281	0.00474	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Benzene	<0.00281		0.00281	0.000276	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Bromobenzene	<0.00281		0.00281	0.000990	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Bromoform	<0.00281		0.00281	0.00281	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Bromomethane	<0.00562		0.00562	0.000506	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Carbon disulfide	<0.00281		0.00281	0.00281	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Carbon tetrachloride	<0.00281		0.00281	0.000544	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Chlorobenzene	0.00449		0.00281	0.000742	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Chlorobromomethane	<0.00281		0.00281	0.000406	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Chlorodibromomethane	<0.00281		0.00281	0.000720	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Chloroethane	<0.00562		0.00562	0.00127	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Chloroform	<0.00281		0.00281	0.000348	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Chloromethane	<0.00562	*	0.00562	0.000340	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
cis-1,2-Dichloroethene	0.000817	J	0.00281	0.000720	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
cis-1,3-Dichloropropene	<0.00281		0.00281	0.000810	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Dichlorobromomethane	<0.00281		0.00281	0.000754	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Dichlorodifluoromethane	<0.00562		0.00562	0.000465	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Ethyl ether	<0.00281		0.00281	0.00236	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Ethylbenzene	<0.00281		0.00281	0.000388	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Ethylene Dibromide	<0.00281		0.00281	0.000722	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Hexachlorobutadiene	<0.00281		0.00281	0.000659	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Isopropyl ether	<0.00281		0.00281	0.00281	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Isopropylbenzene	<0.00281		0.00281	0.000848	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Methyl tert-butyl ether	<0.00281		0.00281	0.000552	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Methylene Chloride	<0.00281		0.00281	0.00259	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
m-Xylene & p-Xylene	<0.00562		0.00562	0.000945	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Naphthalene	<0.0281		0.0281	0.000754	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
n-Butylbenzene	<0.00281		0.00281	0.000489	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
N-Propylbenzene	<0.00281		0.00281	0.000450	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
o-Xylene	<0.00281		0.00281	0.000735	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
sec-Butylbenzene	<0.00281		0.00281	0.000489	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Styrene	<0.00281		0.00281	0.000281	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Tert-amyl methyl ether	<0.00281		0.00281	0.00144	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Tert-butyl ethyl ether	<0.00281		0.00281	0.00247	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
tert-Butylbenzene	<0.00281		0.00281	0.000585	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Tetrachloroethene	<0.00281	*	0.00281	0.000755	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Tetrahydrofuran	<0.0562		0.0562	0.00517	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Toluene	<0.00281		0.00281	0.000425	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
trans-1,2-Dichloroethene	<0.00281		0.00281	0.000580	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
trans-1,3-Dichloropropene	<0.00281		0.00281	0.00247	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Trichloroethene	<0.00281		0.00281	0.00124	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Trichlorofluoromethane	<0.00562		0.00562	0.000532	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Vinyl chloride	<0.00281		0.00281	0.000686	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1
Dibromomethane	<0.00281		0.00281	0.000579	mg/Kg	☼	10/01/13 11:37	10/01/13 22:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130	10/01/13 11:37	10/01/13 22:20	1
1,2-Dichloroethane-d4 (Surr)	94		70 - 130	10/01/13 11:37	10/01/13 22:20	1
4-Bromofluorobenzene (Surr)	116		70 - 130	10/01/13 11:37	10/01/13 22:20	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-4 (6-7)

Lab Sample ID: 480-46783-17

Date Collected: 09/26/13 07:50

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 68.1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0481		0.0481	0.0306	mg/Kg	☼	10/01/13 09:24	10/03/13 22:37	1
PCB-1221	<0.0481		0.0481	0.0233	mg/Kg	☼	10/01/13 09:24	10/03/13 22:37	1
PCB-1232	<0.0481		0.0481	0.0204	mg/Kg	☼	10/01/13 09:24	10/03/13 22:37	1
PCB-1242	<0.0481		0.0481	0.0190	mg/Kg	☼	10/01/13 09:24	10/03/13 22:37	1
PCB-1248	<0.0481		0.0481	0.0248	mg/Kg	☼	10/01/13 09:24	10/03/13 22:37	1
PCB-1254	<0.0481		0.0481	0.0248	mg/Kg	☼	10/01/13 09:24	10/03/13 22:37	1
PCB-1260	0.0282	J	0.0481	0.0248	mg/Kg	☼	10/01/13 09:24	10/03/13 22:37	1
PCB-1262	<0.0481		0.0481	0.0394	mg/Kg	☼	10/01/13 09:24	10/03/13 22:37	1
PCB-1268	<0.0481		0.0481	0.0204	mg/Kg	☼	10/01/13 09:24	10/03/13 22:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	150		30 - 150				10/01/13 09:24	10/03/13 22:37	1
Tetrachloro-m-xylene	71		30 - 150				10/01/13 09:24	10/03/13 22:37	1
DCB Decachlorobiphenyl	67		30 - 150				10/01/13 09:24	10/03/13 22:37	1
DCB Decachlorobiphenyl	77		30 - 150				10/01/13 09:24	10/03/13 22:37	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	6.68	J	7.08	2.83	mg/Kg	☼	09/30/13 14:30	10/02/13 18:18	1
C19-C36 Aliphatics	13.6		7.08	2.83	mg/Kg	☼	09/30/13 14:30	10/02/13 18:18	1
C9-C18 Aliphatics	<7.08		7.08	2.83	mg/Kg	☼	09/30/13 14:30	10/02/13 18:18	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<7.35		7.35	7.35	mg/Kg	☼		10/04/13 10:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	70		40 - 140				09/30/13 14:30	10/02/13 18:18	1
2-Bromonaphthalene	97		40 - 140				09/30/13 14:30	10/02/13 18:18	1
2-Fluorobiphenyl	112		40 - 140				09/30/13 14:30	10/02/13 18:18	1
o-Terphenyl	80		40 - 140				09/30/13 14:30	10/02/13 18:18	1

Client Sample ID: WCSB-2 (14-15)

Lab Sample ID: 480-46783-18

Date Collected: 09/26/13 09:25

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 76.5

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.108		0.108	0.0216	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,1,1-Trichloroethane	<0.108		0.108	0.0157	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,1,2,2-Tetrachloroethane	<0.108		0.108	0.0350	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,1,2-Trichloroethane	<0.108		0.108	0.0280	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,1-Dichloroethane	<0.108		0.108	0.0263	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,1-Dichloroethene	<0.108		0.108	0.0264	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,1-Dichloropropene	<0.108		0.108	0.0306	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,2,3-Trichlorobenzene	<0.108		0.108	0.0229	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,2,3-Trichloropropane	<0.108		0.108	0.0220	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,2,4-Trichlorobenzene	<0.108		0.108	0.0131	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,2,4-Trimethylbenzene	<0.108		0.108	0.0414	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,2-Dibromo-3-Chloropropane	<1.08		1.08	0.108	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,2-Dichlorobenzene	<0.108		0.108	0.0169	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
1,2-Dichloroethane	<0.108		0.108	0.0108	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-2 (14-15)

Lab Sample ID: 480-46783-18

Date Collected: 09/26/13 09:25

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 76.5

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.108		0.108	0.108	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
1,3,5-Trimethylbenzene	<0.108		0.108	0.0139	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
1,3-Dichlorobenzene	0.0189	J	0.108	0.0111	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
1,3-Dichloropropane	<0.108		0.108	0.0129	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
1,4-Dichlorobenzene	<0.108		0.108	0.0302	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
1,4-Dioxane	<10.8		10.8	1.04	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
2,2-Dichloropropane	<0.108		0.108	0.0367	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
2-Butanone (MEK)	<1.08	*	1.08	0.0789	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
2-Chlorotoluene	<0.108		0.108	0.0141	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
2-Hexanone	<1.08		1.08	0.108	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
4-Chlorotoluene	<0.108		0.108	0.0254	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
4-Isopropyltoluene	<0.108		0.108	0.0173	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
4-Methyl-2-pentanone (MIBK)	<1.08		1.08	0.0707	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Acetone	<10.8		10.8	0.182	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Benzene	0.0120	J	0.108	0.0106	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Bromobenzene	<0.108		0.108	0.0380	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Bromoform	<0.108		0.108	0.108	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Bromomethane	<0.216		0.216	0.0194	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Carbon disulfide	<0.108		0.108	0.108	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Carbon tetrachloride	<0.108		0.108	0.0209	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Chlorobenzene	<0.108		0.108	0.0285	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Chlorobromomethane	<0.108		0.108	0.0156	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Chlorodibromomethane	<0.108		0.108	0.0276	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Chloroethane	<0.216		0.216	0.0487	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Chloroform	<0.108		0.108	0.0133	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Chloromethane	<0.216		0.216	0.0130	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
cis-1,2-Dichloroethene	<0.108		0.108	0.0276	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
cis-1,3-Dichloropropene	<0.108		0.108	0.0311	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Dichlorobromomethane	<0.108		0.108	0.0289	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Dichlorodifluoromethane	<0.216	*	0.216	0.0178	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Ethyl ether	<0.108		0.108	0.0906	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Ethylbenzene	<0.108		0.108	0.0149	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Ethylene Dibromide	<0.108		0.108	0.0277	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Hexachlorobutadiene	<0.108		0.108	0.0253	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Isopropyl ether	<0.108		0.108	0.108	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Isopropylbenzene	<0.108		0.108	0.0325	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Methyl tert-butyl ether	<0.108		0.108	0.0212	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Methylene Chloride	<0.108		0.108	0.0992	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
m-Xylene & p-Xylene	<0.216		0.216	0.0362	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Naphthalene	<1.08		1.08	0.0289	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
n-Butylbenzene	<0.108		0.108	0.0188	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
N-Propylbenzene	<0.108		0.108	0.0173	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
o-Xylene	<0.108		0.108	0.0282	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
sec-Butylbenzene	<0.108		0.108	0.0188	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Styrene	<0.108		0.108	0.0108	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Tert-amyl methyl ether	<0.108		0.108	0.0552	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Tert-butyl ethyl ether	<0.108		0.108	0.0949	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
tert-Butylbenzene	<0.108		0.108	0.0224	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1
Tetrachloroethene	<0.108		0.108	0.0289	mg/Kg	☆	10/03/13 12:52	10/04/13 18:43	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-2 (14-15)

Lab Sample ID: 480-46783-18

Date Collected: 09/26/13 09:25

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 76.5

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrahydrofuran	<2.16		2.16	0.198	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
Toluene	<0.108		0.108	0.0163	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
trans-1,2-Dichloroethene	<0.108		0.108	0.0223	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
trans-1,3-Dichloropropene	<0.108		0.108	0.0949	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
Trichloroethene	<0.108		0.108	0.0474	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
Trichlorofluoromethane	<0.216		0.216	0.0204	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
Vinyl chloride	<0.108		0.108	0.0263	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1
Dibromomethane	<0.108		0.108	0.0222	mg/Kg	☼	10/03/13 12:52	10/04/13 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		70 - 130	10/03/13 12:52	10/04/13 18:43	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	10/03/13 12:52	10/04/13 18:43	1
4-Bromofluorobenzene (Surr)	102		70 - 130	10/03/13 12:52	10/04/13 18:43	1

Client Sample ID: WCSB-1 (1-2)

Lab Sample ID: 480-46783-19

Date Collected: 09/26/13 10:40

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 84.4

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00390		0.00390	0.000779	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,1,1-Trichloroethane	<0.00390		0.00390	0.000566	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,1,2,2-Tetrachloroethane	<0.00390		0.00390	0.00126	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,1,2-Trichloroethane	<0.00390		0.00390	0.00101	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,1-Dichloroethane	<0.00390		0.00390	0.000951	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,1-Dichloroethene	<0.00390		0.00390	0.000954	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,1-Dichloropropene	<0.00390		0.00390	0.00111	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,2,3-Trichlorobenzene	<0.00390		0.00390	0.000827	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,2,3-Trichloropropane	<0.00390		0.00390	0.000793	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,2,4-Trichlorobenzene	<0.00390		0.00390	0.000474	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,2,4-Trimethylbenzene	0.00238	J	0.00390	0.00150	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,2-Dibromo-3-Chloropropane	<0.0390		0.0390	0.00390	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,2-Dichlorobenzene	<0.00390		0.00390	0.000609	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,2-Dichloroethane	<0.00390		0.00390	0.000391	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,2-Dichloropropane	<0.00390		0.00390	0.00390	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,3,5-Trimethylbenzene	<0.00390		0.00390	0.000502	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,3-Dichlorobenzene	<0.00390		0.00390	0.000400	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,3-Dichloropropane	<0.00390		0.00390	0.000467	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,4-Dichlorobenzene	<0.00390		0.00390	0.00109	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
1,4-Dioxane	<0.390		0.390	0.0376	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
2,2-Dichloropropane	<0.00390		0.00390	0.00132	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
2-Butanone (MEK)	0.0740	*	0.0390	0.00285	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
2-Chlorotoluene	<0.00390		0.00390	0.000511	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
2-Hexanone	<0.0390		0.0390	0.00390	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
4-Chlorotoluene	<0.00390		0.00390	0.000919	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
4-Isopropyltoluene	<0.00390		0.00390	0.000625	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
4-Methyl-2-pentanone (MIBK)	<0.0390		0.0390	0.00256	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Acetone	0.207	J	0.390	0.00656	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Benzene	0.0463		0.00390	0.000382	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Bromobenzene	<0.00390		0.00390	0.00137	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-1 (1-2)

Lab Sample ID: 480-46783-19

Date Collected: 09/26/13 10:40

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 84.4

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	<0.00390		0.00390	0.00390	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Bromomethane	<0.00779		0.00779	0.000701	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Carbon disulfide	0.00556		0.00390	0.00390	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Carbon tetrachloride	<0.00390		0.00390	0.000754	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Chlorobenzene	<0.00390		0.00390	0.00103	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Chlorobromomethane	<0.00390		0.00390	0.000563	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Chlorodibromomethane	<0.00390		0.00390	0.000997	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Chloroethane	<0.00779		0.00779	0.00176	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Chloroform	<0.00390		0.00390	0.000481	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Chloromethane	<0.00779		0.00779	0.000471	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
cis-1,2-Dichloroethene	<0.00390		0.00390	0.000997	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
cis-1,3-Dichloropropene	<0.00390		0.00390	0.00112	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Dichlorobromomethane	<0.00390		0.00390	0.00104	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Dichlorodifluoromethane	<0.00779		0.00779	0.000644	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Ethyl ether	<0.00390		0.00390	0.00327	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Ethylbenzene	0.0108		0.00390	0.000538	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Ethylene Dibromide	<0.00390		0.00390	0.00100	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Hexachlorobutadiene	<0.00390		0.00390	0.000913	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Isopropyl ether	<0.00390		0.00390	0.00390	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Isopropylbenzene	0.00173 J		0.00390	0.00117	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Methyl tert-butyl ether	<0.00390		0.00390	0.000765	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Methylene Chloride	<0.00390		0.00390	0.00358	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
m-Xylene & p-Xylene	0.00955		0.00779	0.00131	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Naphthalene	<0.0390		0.0390	0.00104	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
n-Butylbenzene	0.00160 J		0.00390	0.000678	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
N-Propylbenzene	0.00411		0.00390	0.000623	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
o-Xylene	0.00643		0.00390	0.00102	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
sec-Butylbenzene	<0.00390		0.00390	0.000678	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Styrene	<0.00390		0.00390	0.000390	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Tert-amyl methyl ether	<0.00390		0.00390	0.00199	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Tert-butyl ethyl ether	<0.00390		0.00390	0.00343	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
tert-Butylbenzene	<0.00390		0.00390	0.000810	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Tetrachloroethene	0.00179 J		0.00390	0.00105	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Tetrahydrofuran	<0.0779		0.0779	0.00717	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Toluene	0.0333		0.00390	0.000589	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
trans-1,2-Dichloroethene	<0.00390		0.00390	0.000804	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
trans-1,3-Dichloropropene	<0.00390		0.00390	0.00343	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Trichloroethene	<0.00390		0.00390	0.00171	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Trichlorofluoromethane	<0.00779		0.00779	0.000737	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Vinyl chloride	<0.00390		0.00390	0.000951	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1
Dibromomethane	<0.00390		0.00390	0.000802	mg/Kg	☼	10/02/13 11:15	10/02/13 18:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130	10/02/13 11:15	10/02/13 18:53	1
1,2-Dichloroethane-d4 (Surr)	111		70 - 130	10/02/13 11:15	10/02/13 18:53	1
4-Bromofluorobenzene (Surr)	95		70 - 130	10/02/13 11:15	10/02/13 18:53	1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0391		0.0391	0.0249	mg/Kg	☼	10/01/13 09:24	10/03/13 23:21	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-1 (1-2)

Lab Sample ID: 480-46783-19

Date Collected: 09/26/13 10:40

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 84.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1221	<0.0391		0.0391	0.0189	mg/Kg	☼	10/01/13 09:24	10/03/13 23:21	1
PCB-1232	<0.0391		0.0391	0.0166	mg/Kg	☼	10/01/13 09:24	10/03/13 23:21	1
PCB-1242	<0.0391		0.0391	0.0154	mg/Kg	☼	10/01/13 09:24	10/03/13 23:21	1
PCB-1248	<0.0391		0.0391	0.0201	mg/Kg	☼	10/01/13 09:24	10/03/13 23:21	1
PCB-1254	<0.0391		0.0391	0.0201	mg/Kg	☼	10/01/13 09:24	10/03/13 23:21	1
PCB-1260	<0.0391		0.0391	0.0201	mg/Kg	☼	10/01/13 09:24	10/03/13 23:21	1
PCB-1262	<0.0391		0.0391	0.0320	mg/Kg	☼	10/01/13 09:24	10/03/13 23:21	1
PCB-1268	<0.0391		0.0391	0.0166	mg/Kg	☼	10/01/13 09:24	10/03/13 23:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		30 - 150	10/01/13 09:24	10/03/13 23:21	1
Tetrachloro-m-xylene	81		30 - 150	10/01/13 09:24	10/03/13 23:21	1
DCB Decachlorobiphenyl	91		30 - 150	10/01/13 09:24	10/03/13 23:21	1
DCB Decachlorobiphenyl	79		30 - 150	10/01/13 09:24	10/03/13 23:21	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	301		5.54	2.22	mg/Kg	☼	09/30/13 14:30	10/02/13 18:48	1
C19-C36 Aliphatics	10.6		5.54	2.22	mg/Kg	☼	09/30/13 14:30	10/02/13 18:48	1
C9-C18 Aliphatics	22.9	B	5.54	2.22	mg/Kg	☼	09/30/13 14:30	10/02/13 18:48	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	145		5.92	5.92	mg/Kg	☼		10/04/13 10:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	48		40 - 140	09/30/13 14:30	10/02/13 18:48	1
2-Bromonaphthalene	104		40 - 140	09/30/13 14:30	10/02/13 18:48	1
2-Fluorobiphenyl	122		40 - 140	09/30/13 14:30	10/02/13 18:48	1
o-Terphenyl	53		40 - 140	09/30/13 14:30	10/02/13 18:48	1

Client Sample ID: WCSB-1 (2.5-3)

Lab Sample ID: 480-46783-20

Date Collected: 09/26/13 10:45

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 69.6

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.159		0.159	0.0318	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,1,1-Trichloroethane	<0.159		0.159	0.0231	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,1,2,2-Tetrachloroethane	<0.159		0.159	0.0516	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,1,2-Trichloroethane	<0.159		0.159	0.0414	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,1-Dichloroethane	<0.159		0.159	0.0388	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,1-Dichloroethene	<0.159		0.159	0.0389	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,1-Dichloropropene	<0.159		0.159	0.0452	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,2,3-Trichlorobenzene	<0.159		0.159	0.0338	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,2,3-Trichloropropane	<0.159		0.159	0.0324	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,2,4-Trichlorobenzene	<0.159		0.159	0.0193	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,2,4-Trimethylbenzene	<0.159		0.159	0.0611	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,2-Dibromo-3-Chloropropane	<1.59		1.59	0.159	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,2-Dichlorobenzene	<0.159		0.159	0.0249	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,2-Dichloroethane	<0.159		0.159	0.0160	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,2-Dichloropropane	<0.159		0.159	0.159	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-1 (2.5-3)

Lab Sample ID: 480-46783-20

Date Collected: 09/26/13 10:45

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 69.6

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	<0.159		0.159	0.0205	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,3-Dichlorobenzene	<0.159		0.159	0.0164	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,3-Dichloropropane	<0.159		0.159	0.0191	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,4-Dichlorobenzene	<0.159		0.159	0.0445	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
1,4-Dioxane	<15.9		15.9	1.53	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
2,2-Dichloropropane	<0.159		0.159	0.0541	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
2-Butanone (MEK)	<1.59	*	1.59	0.116	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
2-Chlorotoluene	<0.159		0.159	0.0209	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
2-Hexanone	<1.59		1.59	0.159	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
4-Chlorotoluene	<0.159		0.159	0.0375	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
4-Isopropyltoluene	<0.159		0.159	0.0255	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
4-Methyl-2-pentanone (MIBK)	<1.59		1.59	0.104	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Acetone	<15.9		15.9	0.268	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Benzene	<0.159		0.159	0.0156	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Bromobenzene	<0.159		0.159	0.0560	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Bromoform	<0.159		0.159	0.159	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Bromomethane	<0.318		0.318	0.0286	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Carbon disulfide	<0.159		0.159	0.159	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Carbon tetrachloride	<0.159		0.159	0.0308	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Chlorobenzene	<0.159		0.159	0.0420	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Chlorobromomethane	<0.159		0.159	0.0230	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Chlorodibromomethane	<0.159		0.159	0.0407	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Chloroethane	<0.318		0.318	0.0719	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Chloroform	<0.159		0.159	0.0197	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Chloromethane	<0.318		0.318	0.0192	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
cis-1,2-Dichloroethene	<0.159		0.159	0.0407	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
cis-1,3-Dichloropropene	<0.159		0.159	0.0458	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Dichlorobromomethane	<0.159		0.159	0.0426	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Dichlorodifluoromethane	<0.318	*	0.318	0.0263	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Ethyl ether	<0.159		0.159	0.134	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Ethylbenzene	<0.159		0.159	0.0220	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Ethylene Dibromide	<0.159		0.159	0.0408	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Hexachlorobutadiene	<0.159		0.159	0.0373	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Isopropyl ether	<0.159		0.159	0.159	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Isopropylbenzene	<0.159		0.159	0.0480	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Methyl tert-butyl ether	<0.159		0.159	0.0312	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Methylene Chloride	<0.159		0.159	0.146	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
m-Xylene & p-Xylene	<0.318		0.318	0.0534	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Naphthalene	<1.59		1.59	0.0426	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
n-Butylbenzene	<0.159		0.159	0.0277	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
N-Propylbenzene	<0.159		0.159	0.0255	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
o-Xylene	<0.159		0.159	0.0415	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
sec-Butylbenzene	<0.159		0.159	0.0277	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Styrene	<0.159		0.159	0.0159	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Tert-amyl methyl ether	<0.159		0.159	0.0814	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Tert-butyl ethyl ether	<0.159		0.159	0.140	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
tert-Butylbenzene	<0.159		0.159	0.0331	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Tetrachloroethene	<0.159		0.159	0.0427	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Tetrahydrofuran	<3.18		3.18	0.293	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-1 (2.5-3)

Lab Sample ID: 480-46783-20

Date Collected: 09/26/13 10:45

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 69.6

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.159		0.159	0.0241	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
trans-1,2-Dichloroethene	<0.159		0.159	0.0328	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
trans-1,3-Dichloropropene	<0.159		0.159	0.140	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Trichloroethene	<0.159		0.159	0.0700	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Trichlorofluoromethane	<0.318		0.318	0.0301	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Vinyl chloride	<0.159		0.159	0.0388	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1
Dibromomethane	<0.159		0.159	0.0328	mg/Kg	☼	10/03/13 12:52	10/04/13 19:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		70 - 130	10/03/13 12:52	10/04/13 19:09	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130	10/03/13 12:52	10/04/13 19:09	1
4-Bromofluorobenzene (Surr)	100		70 - 130	10/03/13 12:52	10/04/13 19:09	1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<4.65		4.65	2.96	mg/Kg	☼	10/01/13 09:24	10/03/13 23:36	100
PCB-1221	<4.65		4.65	2.25	mg/Kg	☼	10/01/13 09:24	10/03/13 23:36	100
PCB-1232	<4.65		4.65	1.97	mg/Kg	☼	10/01/13 09:24	10/03/13 23:36	100
PCB-1242	<4.65		4.65	1.83	mg/Kg	☼	10/01/13 09:24	10/03/13 23:36	100
PCB-1248	<4.65		4.65	2.39	mg/Kg	☼	10/01/13 09:24	10/03/13 23:36	100
PCB-1254	<4.65		4.65	2.39	mg/Kg	☼	10/01/13 09:24	10/03/13 23:36	100
PCB-1260	5.27		4.65	2.39	mg/Kg	☼	10/01/13 09:24	10/03/13 23:36	100
PCB-1262	<4.65		4.65	3.80	mg/Kg	☼	10/01/13 09:24	10/03/13 23:36	100
PCB-1268	<4.65		4.65	1.97	mg/Kg	☼	10/01/13 09:24	10/03/13 23:36	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	10/01/13 09:24	10/03/13 23:36	100
Tetrachloro-m-xylene	0	X	30 - 150	10/01/13 09:24	10/03/13 23:36	100
DCB Decachlorobiphenyl	0	X	30 - 150	10/01/13 09:24	10/03/13 23:36	100
DCB Decachlorobiphenyl	0	X	30 - 150	10/01/13 09:24	10/03/13 23:36	100

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	3.19	J	7.03	2.81	mg/Kg	☼	09/30/13 14:30	10/02/13 19:17	1
C19-C36 Aliphatics	<7.03		7.03	2.81	mg/Kg	☼	09/30/13 14:30	10/02/13 19:17	1
C9-C18 Aliphatics	<7.03		7.03	2.81	mg/Kg	☼	09/30/13 14:30	10/02/13 19:17	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<7.18		7.18	7.18	mg/Kg	☼		10/04/13 10:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	65		40 - 140	09/30/13 14:30	10/02/13 19:17	1
2-Bromonaphthalene	98		40 - 140	09/30/13 14:30	10/02/13 19:17	1
2-Fluorobiphenyl	113		40 - 140	09/30/13 14:30	10/02/13 19:17	1
o-Terphenyl	79		40 - 140	09/30/13 14:30	10/02/13 19:17	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.711		0.711	0.284	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1
Arsenic	19.3		1.42	0.569	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1
Barium	21.5		0.711	0.156	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1
Beryllium	0.577		0.284	0.0398	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-1 (2.5-3)

Lab Sample ID: 480-46783-20

Date Collected: 09/26/13 10:45

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 69.6

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.284	^	0.284	0.0427	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1
Chromium	17.6		0.711	0.284	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1
Nickel	22.8		1.42	0.327	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1
Thallium	<1.42		1.42	0.427	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1
Vanadium	26.9		0.711	0.156	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1
Zinc	82.6	B	3.55	0.218	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1
Lead	183		0.711	0.341	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1
Selenium	1.10	^	0.711	0.569	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1
Antimony	<0.711	^	0.711	0.569	mg/Kg	☼	09/30/13 14:10	10/01/13 20:12	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0171	J	0.138	0.0112	mg/Kg	☼	09/30/13 10:40	09/30/13 12:18	1

Client Sample ID: WCSB-1 (7-8)

Lab Sample ID: 480-46783-21

Date Collected: 09/26/13 10:55

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 74.2

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00273		0.00273	0.000545	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,1,1-Trichloroethane	<0.00273		0.00273	0.000396	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,1,2,2-Tetrachloroethane	<0.00273		0.00273	0.000885	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,1,2-Trichloroethane	<0.00273		0.00273	0.000709	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,1-Dichloroethane	<0.00273		0.00273	0.000665	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,1-Dichloroethene	<0.00273		0.00273	0.000668	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,1-Dichloropropene	<0.00273		0.00273	0.000774	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,2,3-Trichlorobenzene	<0.00273		0.00273	0.000579	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,2,3-Trichloropropane	<0.00273		0.00273	0.000555	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,2,4-Trichlorobenzene	<0.00273		0.00273	0.000332	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,2,4-Trimethylbenzene	<0.00273		0.00273	0.00105	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,2-Dibromo-3-Chloropropane	<0.0273		0.0273	0.00273	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,2-Dichlorobenzene	<0.00273		0.00273	0.000426	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,2-Dichloroethane	<0.00273		0.00273	0.000274	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,2-Dichloropropane	<0.00273		0.00273	0.00273	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,3,5-Trimethylbenzene	<0.00273		0.00273	0.000351	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,3-Dichlorobenzene	<0.00273		0.00273	0.000280	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,3-Dichloropropane	<0.00273		0.00273	0.000327	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,4-Dichlorobenzene	<0.00273		0.00273	0.000764	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
1,4-Dioxane	<0.273		0.273	0.0263	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
2,2-Dichloropropane	<0.00273		0.00273	0.000927	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
2-Butanone (MEK)	0.0286	*	0.0273	0.00200	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
2-Chlorotoluene	<0.00273		0.00273	0.000358	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
2-Hexanone	<0.0273		0.0273	0.00273	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
4-Chlorotoluene	<0.00273		0.00273	0.000644	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
4-Isopropyltoluene	<0.00273		0.00273	0.000437	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
4-Methyl-2-pentanone (MIBK)	<0.0273		0.0273	0.00179	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Acetone	0.0965	J	0.273	0.00459	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Benzene	0.00156	J	0.00273	0.000267	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Bromobenzene	<0.00273		0.00273	0.000960	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-1 (7-8)

Lab Sample ID: 480-46783-21

Date Collected: 09/26/13 10:55

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 74.2

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	<0.00273		0.00273	0.00273	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Bromomethane	<0.00545		0.00545	0.000491	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Carbon disulfide	0.00822		0.00273	0.00273	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Carbon tetrachloride	<0.00273		0.00273	0.000528	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Chlorobenzene	<0.00273		0.00273	0.000720	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Chlorobromomethane	<0.00273		0.00273	0.000394	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Chlorodibromomethane	<0.00273		0.00273	0.000698	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Chloroethane	<0.00545		0.00545	0.00123	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Chloroform	<0.00273		0.00273	0.000337	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Chloromethane	<0.00545		0.00545	0.000329	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
cis-1,2-Dichloroethene	<0.00273		0.00273	0.000698	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
cis-1,3-Dichloropropene	<0.00273		0.00273	0.000785	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Dichlorobromomethane	<0.00273		0.00273	0.000731	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Dichlorodifluoromethane	<0.00545		0.00545	0.000450	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Ethyl ether	<0.00273		0.00273	0.00229	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Ethylbenzene	0.000546	J	0.00273	0.000376	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Ethylene Dibromide	<0.00273		0.00273	0.000700	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Hexachlorobutadiene	<0.00273		0.00273	0.000639	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Isopropyl ether	<0.00273		0.00273	0.00273	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Isopropylbenzene	<0.00273		0.00273	0.000822	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Methyl tert-butyl ether	<0.00273		0.00273	0.000536	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Methylene Chloride	<0.00273		0.00273	0.00251	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
m-Xylene & p-Xylene	<0.00545		0.00545	0.000916	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Naphthalene	0.00993	J	0.0273	0.000731	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
n-Butylbenzene	<0.00273		0.00273	0.000474	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
N-Propylbenzene	<0.00273		0.00273	0.000436	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
o-Xylene	<0.00273		0.00273	0.000712	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
sec-Butylbenzene	<0.00273		0.00273	0.000474	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Styrene	<0.00273		0.00273	0.000273	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Tert-amyl methyl ether	<0.00273		0.00273	0.00140	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Tert-butyl ethyl ether	<0.00273		0.00273	0.00240	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
tert-Butylbenzene	<0.00273		0.00273	0.000567	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Tetrachloroethene	<0.00273		0.00273	0.000732	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Tetrahydrofuran	<0.0545		0.0545	0.00502	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Toluene	0.00147	J	0.00273	0.000412	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
trans-1,2-Dichloroethene	<0.00273		0.00273	0.000563	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
trans-1,3-Dichloropropene	<0.00273		0.00273	0.00240	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Trichloroethene	<0.00273		0.00273	0.00120	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Trichlorofluoromethane	<0.00545		0.00545	0.000516	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Vinyl chloride	<0.00273		0.00273	0.000665	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1
Dibromomethane	<0.00273		0.00273	0.000562	mg/Kg	☼	10/02/13 11:15	10/02/13 19:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130	10/02/13 11:15	10/02/13 19:19	1
1,2-Dichloroethane-d4 (Surr)	105		70 - 130	10/02/13 11:15	10/02/13 19:19	1
4-Bromofluorobenzene (Surr)	98		70 - 130	10/02/13 11:15	10/02/13 19:19	1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0443		0.0443	0.0282	mg/Kg	☼	10/01/13 09:24	10/03/13 23:51	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-1 (7-8)

Lab Sample ID: 480-46783-21

Date Collected: 09/26/13 10:55

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 74.2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1221	<0.0443		0.0443	0.0215	mg/Kg	☼	10/01/13 09:24	10/03/13 23:51	1
PCB-1232	<0.0443		0.0443	0.0188	mg/Kg	☼	10/01/13 09:24	10/03/13 23:51	1
PCB-1242	<0.0443		0.0443	0.0175	mg/Kg	☼	10/01/13 09:24	10/03/13 23:51	1
PCB-1248	<0.0443		0.0443	0.0228	mg/Kg	☼	10/01/13 09:24	10/03/13 23:51	1
PCB-1254	<0.0443		0.0443	0.0228	mg/Kg	☼	10/01/13 09:24	10/03/13 23:51	1
PCB-1260	0.0307	J	0.0443	0.0228	mg/Kg	☼	10/01/13 09:24	10/03/13 23:51	1
PCB-1262	<0.0443		0.0443	0.0363	mg/Kg	☼	10/01/13 09:24	10/03/13 23:51	1
PCB-1268	<0.0443		0.0443	0.0188	mg/Kg	☼	10/01/13 09:24	10/03/13 23:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	67		30 - 150	10/01/13 09:24	10/03/13 23:51	1
Tetrachloro-m-xylene	74		30 - 150	10/01/13 09:24	10/03/13 23:51	1
DCB Decachlorobiphenyl	521	X	30 - 150	10/01/13 09:24	10/03/13 23:51	1
DCB Decachlorobiphenyl	83		30 - 150	10/01/13 09:24	10/03/13 23:51	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	33.3		6.40	2.56	mg/Kg	☼	09/30/13 14:30	10/02/13 19:47	1
C19-C36 Aliphatics	<6.40		6.40	2.56	mg/Kg	☼	09/30/13 14:30	10/02/13 19:47	1
C9-C18 Aliphatics	<6.40		6.40	2.56	mg/Kg	☼	09/30/13 14:30	10/02/13 19:47	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	21.5		6.74	6.74	mg/Kg	☼		10/07/13 10:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	71		40 - 140	09/30/13 14:30	10/02/13 19:47	1
2-Bromonaphthalene	110		40 - 140	09/30/13 14:30	10/02/13 19:47	1
2-Fluorobiphenyl	124		40 - 140	09/30/13 14:30	10/02/13 19:47	1
o-Terphenyl	88		40 - 140	09/30/13 14:30	10/02/13 19:47	1

Client Sample ID: WCSB-3 (5-6)

Lab Sample ID: 480-46783-22

Date Collected: 09/26/13 12:00

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 89.5

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00303		0.00303	0.000606	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,1,1-Trichloroethane	<0.00303		0.00303	0.000440	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,1,2,2-Tetrachloroethane	<0.00303		0.00303	0.000983	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,1,2-Trichloroethane	<0.00303		0.00303	0.000788	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,1-Dichloroethane	<0.00303		0.00303	0.000740	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,1-Dichloroethene	<0.00303		0.00303	0.000742	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,1-Dichloropropene	<0.00303		0.00303	0.000861	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,2,3-Trichlorobenzene	<0.00303		0.00303	0.000644	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,2,3-Trichloropropane	<0.00303		0.00303	0.000617	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,2,4-Trichlorobenzene	<0.00303		0.00303	0.000369	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,2,4-Trimethylbenzene	<0.00303		0.00303	0.00116	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,2-Dibromo-3-Chloropropane	<0.0303		0.0303	0.00303	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,2-Dichlorobenzene	<0.00303		0.00303	0.000474	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,2-Dichloroethane	<0.00303		0.00303	0.000304	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
1,2-Dichloropropane	<0.00303		0.00303	0.00303	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-3 (5-6)

Lab Sample ID: 480-46783-22

Date Collected: 09/26/13 12:00

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 89.5

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	<0.00303		0.00303	0.000390	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
1,3-Dichlorobenzene	<0.00303		0.00303	0.000312	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
1,3-Dichloropropane	<0.00303		0.00303	0.000364	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
1,4-Dichlorobenzene	<0.00303		0.00303	0.000849	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
1,4-Dioxane	<0.303		0.303	0.0292	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
2,2-Dichloropropane	<0.00303		0.00303	0.00103	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
2-Butanone (MEK)	<0.0303		0.0303	0.00222	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
2-Chlorotoluene	<0.00303		0.00303	0.000398	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
2-Hexanone	<0.0303		0.0303	0.00303	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
4-Chlorotoluene	<0.00303		0.00303	0.000715	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
4-Isopropyltoluene	0.00369		0.00303	0.000486	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
4-Methyl-2-pentanone (MIBK)	<0.0303		0.0303	0.00199	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Acetone	0.00815	J	0.303	0.00510	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Benzene	<0.00303		0.00303	0.000297	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Bromobenzene	<0.00303		0.00303	0.00107	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Bromoform	<0.00303		0.00303	0.00303	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Bromomethane	<0.00606		0.00606	0.000546	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Carbon disulfide	<0.00303		0.00303	0.00303	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Carbon tetrachloride	<0.00303		0.00303	0.000587	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Chlorobenzene	<0.00303		0.00303	0.000800	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Chlorobromomethane	<0.00303		0.00303	0.000438	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Chlorodibromomethane	<0.00303		0.00303	0.000776	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Chloroethane	<0.00606		0.00606	0.00137	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Chloroform	<0.00303		0.00303	0.000375	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Chloromethane	<0.00606		0.00606	0.000366	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
cis-1,2-Dichloroethene	<0.00303		0.00303	0.000776	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
cis-1,3-Dichloropropene	<0.00303		0.00303	0.000873	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Dichlorobromomethane	<0.00303		0.00303	0.000812	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Dichlorodifluoromethane	<0.00606		0.00606	0.000501	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Ethyl ether	<0.00303		0.00303	0.00255	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Ethylbenzene	<0.00303		0.00303	0.000418	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Ethylene Dibromide	<0.00303		0.00303	0.000778	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Hexachlorobutadiene	<0.00303		0.00303	0.000710	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Isopropyl ether	<0.00303		0.00303	0.00303	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Isopropylbenzene	<0.00303		0.00303	0.000914	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Methyl tert-butyl ether	<0.00303		0.00303	0.000595	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Methylene Chloride	<0.00303		0.00303	0.00279	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
m-Xylene & p-Xylene	<0.00606		0.00606	0.00102	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Naphthalene	0.0486		0.0303	0.000812	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
n-Butylbenzene	<0.00303		0.00303	0.000527	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
N-Propylbenzene	<0.00303		0.00303	0.000485	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
o-Xylene	<0.00303		0.00303	0.000792	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
sec-Butylbenzene	<0.00303		0.00303	0.000527	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Styrene	<0.00303		0.00303	0.000303	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Tert-amyl methyl ether	<0.00303		0.00303	0.00155	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Tert-butyl ethyl ether	<0.00303		0.00303	0.00267	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
tert-Butylbenzene	<0.00303		0.00303	0.000630	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Tetrachloroethene	0.00373		0.00303	0.000813	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1
Tetrahydrofuran	<0.0606		0.0606	0.00558	mg/Kg	☆	10/06/13 23:23	10/07/13 02:48	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-3 (5-6)

Date Collected: 09/26/13 12:00

Date Received: 09/28/13 01:00

Lab Sample ID: 480-46783-22

Matrix: Solid

Percent Solids: 89.5

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00303		0.00303	0.000458	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
trans-1,2-Dichloroethene	<0.00303		0.00303	0.000626	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
trans-1,3-Dichloropropene	<0.00303		0.00303	0.00267	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
Trichloroethene	<0.00303		0.00303	0.00133	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
Trichlorofluoromethane	<0.00606		0.00606	0.000573	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
Vinyl chloride	<0.00303		0.00303	0.000740	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1
Dibromomethane	<0.00303		0.00303	0.000624	mg/Kg	☼	10/06/13 23:23	10/07/13 02:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130	10/06/13 23:23	10/07/13 02:48	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 130	10/06/13 23:23	10/07/13 02:48	1
4-Bromofluorobenzene (Surr)	89		70 - 130	10/06/13 23:23	10/07/13 02:48	1

Client Sample ID: WCSB-3 (7-8)

Date Collected: 09/26/13 11:55

Date Received: 09/28/13 01:00

Lab Sample ID: 480-46783-23

Matrix: Solid

Percent Solids: 72.7

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	1.20		0.344	0.0138	mg/Kg	☼		10/07/13 11:24	1
C9-C12 Aliphatics (adjusted)	<0.344		0.344	0.0138	mg/Kg	☼		10/07/13 11:24	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0616	J	0.101	0.0202	mg/Kg	☼	10/01/13 12:20	10/02/13 18:50	1
Ethylbenzene	0.0281	J	0.101	0.0202	mg/Kg	☼	10/01/13 12:20	10/02/13 18:50	1
Methyl tert-butyl ether	<0.101		0.101	0.0202	mg/Kg	☼	10/01/13 12:20	10/02/13 18:50	1
m-Xylene & p-Xylene	<0.202		0.202	0.0202	mg/Kg	☼	10/01/13 12:20	10/02/13 18:50	1
Naphthalene	0.107	B	0.101	0.0202	mg/Kg	☼	10/01/13 12:20	10/02/13 18:50	1
o-Xylene	<0.101		0.101	0.0202	mg/Kg	☼	10/01/13 12:20	10/02/13 18:50	1
Toluene	0.0306	J	0.101	0.0202	mg/Kg	☼	10/01/13 12:20	10/02/13 18:50	1
C5-C8 Aliphatics (unadjusted)	0.964	B	0.504	0.0202	mg/Kg	☼	10/01/13 12:20	10/02/13 18:50	1
C9-C10 Aromatics	1.12		0.504	0.0202	mg/Kg	☼	10/01/13 12:20	10/02/13 18:50	1
C9-C12 Aliphatics (unadjusted)	0.659	B	0.504	0.0202	mg/Kg	☼	10/01/13 12:20	10/02/13 18:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	87		70 - 130	10/01/13 12:20	10/02/13 18:50	1
2,5-Dibromotoluene (pid)	90		70 - 130	10/01/13 12:20	10/02/13 18:50	1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0449		0.0449	0.0286	mg/Kg	☼	10/01/13 09:24	10/04/13 00:06	1
PCB-1221	<0.0449		0.0449	0.0218	mg/Kg	☼	10/01/13 09:24	10/04/13 00:06	1
PCB-1232	<0.0449		0.0449	0.0190	mg/Kg	☼	10/01/13 09:24	10/04/13 00:06	1
PCB-1242	<0.0449		0.0449	0.0177	mg/Kg	☼	10/01/13 09:24	10/04/13 00:06	1
PCB-1248	<0.0449		0.0449	0.0231	mg/Kg	☼	10/01/13 09:24	10/04/13 00:06	1
PCB-1254	<0.0449		0.0449	0.0231	mg/Kg	☼	10/01/13 09:24	10/04/13 00:06	1
PCB-1260	<0.0449		0.0449	0.0231	mg/Kg	☼	10/01/13 09:24	10/04/13 00:06	1
PCB-1262	<0.0449		0.0449	0.0367	mg/Kg	☼	10/01/13 09:24	10/04/13 00:06	1
PCB-1268	<0.0449		0.0449	0.0190	mg/Kg	☼	10/01/13 09:24	10/04/13 00:06	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-3 (7-8)

Date Collected: 09/26/13 11:55

Date Received: 09/28/13 01:00

Lab Sample ID: 480-46783-23

Matrix: Solid

Percent Solids: 72.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		30 - 150	10/01/13 09:24	10/04/13 00:06	1
Tetrachloro-m-xylene	74		30 - 150	10/01/13 09:24	10/04/13 00:06	1
DCB Decachlorobiphenyl	65		30 - 150	10/01/13 09:24	10/04/13 00:06	1
DCB Decachlorobiphenyl	72		30 - 150	10/01/13 09:24	10/04/13 00:06	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	5.54	J	6.52	2.61	mg/Kg	☼	09/30/13 14:30	10/02/13 20:16	1
C19-C36 Aliphatics	12.7		6.52	2.61	mg/Kg	☼	09/30/13 14:30	10/02/13 20:16	1
C9-C18 Aliphatics	<6.52		6.52	2.61	mg/Kg	☼	09/30/13 14:30	10/02/13 20:16	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<6.88		6.88	6.88	mg/Kg	☼		10/04/13 10:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	59		40 - 140				09/30/13 14:30	10/02/13 20:16	1
2-Bromonaphthalene	96		40 - 140				09/30/13 14:30	10/02/13 20:16	1
2-Fluorobiphenyl	113		40 - 140				09/30/13 14:30	10/02/13 20:16	1
o-Terphenyl	72		40 - 140				09/30/13 14:30	10/02/13 20:16	1

Client Sample ID: WCSB-9 (1-2)

Date Collected: 09/26/13 13:20

Date Received: 09/28/13 01:00

Lab Sample ID: 480-46783-24

Matrix: Solid

Percent Solids: 83.6

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	237		5.75	2.30	mg/Kg	☼	09/30/13 14:30	10/02/13 20:46	1
C19-C36 Aliphatics	1940		5.75	2.30	mg/Kg	☼	09/30/13 14:30	10/02/13 20:46	1
C9-C18 Aliphatics	180	B	5.75	2.30	mg/Kg	☼	09/30/13 14:30	10/02/13 20:46	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	119		5.98	5.98	mg/Kg	☼		10/04/13 10:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	65		40 - 140				09/30/13 14:30	10/02/13 20:46	1
2-Bromonaphthalene	105		40 - 140				09/30/13 14:30	10/02/13 20:46	1
2-Fluorobiphenyl	123		40 - 140				09/30/13 14:30	10/02/13 20:46	1
o-Terphenyl	70		40 - 140				09/30/13 14:30	10/02/13 20:46	1

Client Sample ID: WCSB-9 (2.5-3)

Date Collected: 09/26/13 13:25

Date Received: 09/28/13 01:00

Lab Sample ID: 480-46783-25

Matrix: Solid

Percent Solids: 84.2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0388		0.0388	0.0247	mg/Kg	☼	10/01/13 09:24	10/04/13 00:21	1
PCB-1221	<0.0388		0.0388	0.0188	mg/Kg	☼	10/01/13 09:24	10/04/13 00:21	1
PCB-1232	<0.0388		0.0388	0.0164	mg/Kg	☼	10/01/13 09:24	10/04/13 00:21	1
PCB-1242	<0.0388		0.0388	0.0153	mg/Kg	☼	10/01/13 09:24	10/04/13 00:21	1
PCB-1248	<0.0388		0.0388	0.0200	mg/Kg	☼	10/01/13 09:24	10/04/13 00:21	1
PCB-1254	<0.0388		0.0388	0.0200	mg/Kg	☼	10/01/13 09:24	10/04/13 00:21	1
PCB-1260	0.0408		0.0388	0.0200	mg/Kg	☼	10/01/13 09:24	10/04/13 00:21	1
PCB-1262	<0.0388		0.0388	0.0317	mg/Kg	☼	10/01/13 09:24	10/04/13 00:21	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-9 (2.5-3)

Lab Sample ID: 480-46783-25

Date Collected: 09/26/13 13:25

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 84.2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	<0.0388		0.0388	0.0164	mg/Kg	☼	10/01/13 09:24	10/04/13 00:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	72		30 - 150				10/01/13 09:24	10/04/13 00:21	1
Tetrachloro-m-xylene	77		30 - 150				10/01/13 09:24	10/04/13 00:21	1
DCB Decachlorobiphenyl	104		30 - 150				10/01/13 09:24	10/04/13 00:21	1
DCB Decachlorobiphenyl	82		30 - 150				10/01/13 09:24	10/04/13 00:21	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.550		0.550	0.220	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1
Arsenic	6.70		1.10	0.440	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1
Barium	112		0.550	0.121	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1
Beryllium	1.45		0.220	0.0308	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1
Cadmium	0.695 ^		0.220	0.0330	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1
Chromium	13.6		0.550	0.220	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1
Nickel	15.1		1.10	0.253	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1
Thallium	<1.10		1.10	0.330	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1
Vanadium	22.0		0.550	0.121	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1
Zinc	278 B		2.75	0.168	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1
Lead	218		0.550	0.264	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1
Selenium	1.00 ^		0.550	0.440	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1
Antimony	<0.550 ^		0.550	0.440	mg/Kg	☼	09/30/13 14:10	10/01/13 20:29	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.207		0.113	0.00919	mg/Kg	☼	09/30/13 10:40	09/30/13 12:29	1

Client Sample ID: WCSB-909 (2.5-3)

Lab Sample ID: 480-46783-26

Date Collected: 09/26/13 13:25

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 84.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0390		0.0390	0.0248	mg/Kg	☼	10/01/13 09:24	10/04/13 00:36	1
PCB-1221	<0.0390		0.0390	0.0189	mg/Kg	☼	10/01/13 09:24	10/04/13 00:36	1
PCB-1232	<0.0390		0.0390	0.0165	mg/Kg	☼	10/01/13 09:24	10/04/13 00:36	1
PCB-1242	<0.0390		0.0390	0.0154	mg/Kg	☼	10/01/13 09:24	10/04/13 00:36	1
PCB-1248	<0.0390		0.0390	0.0201	mg/Kg	☼	10/01/13 09:24	10/04/13 00:36	1
PCB-1254	<0.0390		0.0390	0.0201	mg/Kg	☼	10/01/13 09:24	10/04/13 00:36	1
PCB-1260	0.0555		0.0390	0.0201	mg/Kg	☼	10/01/13 09:24	10/04/13 00:36	1
PCB-1262	<0.0390		0.0390	0.0319	mg/Kg	☼	10/01/13 09:24	10/04/13 00:36	1
PCB-1268	<0.0390		0.0390	0.0165	mg/Kg	☼	10/01/13 09:24	10/04/13 00:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		30 - 150				10/01/13 09:24	10/04/13 00:36	1
Tetrachloro-m-xylene	74		30 - 150				10/01/13 09:24	10/04/13 00:36	1
DCB Decachlorobiphenyl	100		30 - 150				10/01/13 09:24	10/04/13 00:36	1
DCB Decachlorobiphenyl	84		30 - 150				10/01/13 09:24	10/04/13 00:36	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-10 (2.5-3)

Lab Sample ID: 480-46783-27

Date Collected: 09/26/13 14:05

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 93.4

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.534		0.534	0.213	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1
Arsenic	7.74		1.07	0.427	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1
Barium	31.6		0.534	0.117	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1
Beryllium	1.93		0.213	0.0299	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1
Cadmium	0.348	^	0.213	0.0320	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1
Chromium	1.52		0.534	0.213	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1
Nickel	3.20		1.07	0.245	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1
Thallium	<1.07		1.07	0.320	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1
Vanadium	2.32		0.534	0.117	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1
Zinc	163	B	2.67	0.163	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1
Lead	356		0.534	0.256	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1
Selenium	0.706	^	0.534	0.427	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1
Antimony	<0.534	^	0.534	0.427	mg/Kg	☼	09/30/13 14:10	10/01/13 20:32	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0769	J	0.102	0.00828	mg/Kg	☼	09/30/13 10:40	09/30/13 12:31	1

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (70-130)	12DCE (70-130)	BFB (70-130)
480-46783-1	WCSB-11 (1-2)	103	104	93
480-46783-4	WCSB-7 (4-5)	98	101	95
480-46783-5	WCSB-7 (7.5-8)	101	94	114
480-46783-6	WCSB-8 (2-2.5)	99	99	101
480-46783-6 - DL	WCSB-8 (2-2.5)	99	97	103
480-46783-8	WCSB-8 (7-8)	99	96	115
480-46783-10	WCSB-6 (4-5)	102	95	115
480-46783-11	WCSB-6 (8-9)	98	99	112
480-46783-12	WCSB-5 (0.5-1.5)	95	97	100
480-46783-12 - DL	WCSB-5 (0.5-1.5)	96	98	100
480-46783-13	WCSB-5 (5-6)	94	96	98
480-46783-13 - DL	WCSB-5 (5-6)	96	96	98
480-46783-15	TB-09252013	100	103	98
480-46783-16	WCSB-4 (2.5-3)	86	119	92
480-46783-17	WCSB-4 (6-7)	101	94	116
480-46783-18	WCSB-2 (14-15)	97	99	102
480-46783-19	WCSB-1 (1-2)	96	111	95
480-46783-20	WCSB-1 (2.5-3)	95	97	100
480-46783-21	WCSB-1 (7-8)	101	105	98
480-46783-22	WCSB-3 (5-6)	99	112	89
LCS 480-142036/6	Lab Control Sample	100	93	120
LCS 480-142288/4	Lab Control Sample	98	101	99
LCS 480-142564/10-A	Lab Control Sample	96	104	98
LCS 480-142564/1-A	Lab Control Sample	97	101	101
LCS 480-143062/7	Lab Control Sample	99	109	89
LCSD 480-142036/7	Lab Control Sample Dup	101	93	119
LCSD 480-142288/5	Lab Control Sample Dup	100	101	99
LCSD 480-142564/11-A	Lab Control Sample Dup	97	101	100
LCSD 480-142564/2-A	Lab Control Sample Dup	98	100	104
LCSD 480-143062/8	Lab Control Sample Dup	99	108	88
MB 480-142036/8	Method Blank	100	90	116
MB 480-142288/6	Method Blank	100	102	97
MB 480-142564/12-A	Method Blank	98	98	100
MB 480-142564/3-A	Method Blank	97	99	98
MB 480-143062/9	Method Blank	99	106	85

Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		25DBT2 (70-130)	25DBT1 (70-130)
480-46783-1	WCSB-11 (1-2)	75	78
480-46783-4	WCSB-7 (4-5)	88	87

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		25DBT2 (70-130)	25DBT1 (70-130)
480-46783-6	WCSB-8 (2-2.5)	90	90
480-46783-8	WCSB-8 (7-8)	84	84
480-46783-11	WCSB-6 (8-9)	86	88
480-46783-13	WCSB-5 (5-6)	90	93
480-46783-16	WCSB-4 (2.5-3)	93	93
480-46783-23	WCSB-3 (7-8)	87	90
LCS 480-142077/2-A	Lab Control Sample	87	88
LCS 480-142333/2-A	Lab Control Sample	87	91
LCS 480-142561/2-A	Lab Control Sample	86	90
LCSD 480-142077/3-A	Lab Control Sample Dup	89	90
LCSD 480-142333/3-A	Lab Control Sample Dup	89	92
LCSD 480-142561/3-A	Lab Control Sample Dup	86	88
MB 480-142077/1-A	Method Blank	87	89
MB 480-142333/1-A	Method Blank	84	87
MB 480-142561/1-A	Method Blank	79	83
Surrogate Legend			
25DBT = 2,5-Dibromotoluene (fid)			

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (30-150)	TCX2 (30-150)	DCB1 (30-150)	DCB2 (30-150)
480-46783-2	WCSB-11 (2.5-3)	0 X	0 X	197 X	120
480-46783-3	WCSB-7 (2.5-3)	57	64	280 X	46
480-46783-7	WCSB-8 (2.5-3)	59	67	141	77
480-46783-8	WCSB-8 (7-8)	68	67	58	64
480-46783-9	WCSB-6 (2.5-3)	71	73	69	84
480-46783-12	WCSB-5 (0.5-1.5)	0 X	0 X	0 X	0 X
480-46783-14	WCSB-5 (2.5-3)	0 X	0 X	0 X	0 X
480-46783-14 MS	WCSB-5 (2.5-3)	0 X	0 X	0 X	0 X
480-46783-14 MSD	WCSB-5 (2.5-3)	0 X	0 X	0 X	0 X
480-46783-16	WCSB-4 (2.5-3)	62	75	66	78
480-46783-17	WCSB-4 (6-7)	150	71	67	77
480-46783-19	WCSB-1 (1-2)	73	81	91	79
480-46783-20	WCSB-1 (2.5-3)	0 X	0 X	0 X	0 X
480-46783-21	WCSB-1 (7-8)	67	74	521 X	83
480-46783-23	WCSB-3 (7-8)	70	74	65	72
480-46783-25	WCSB-9 (2.5-3)	72	77	104	82
480-46783-26	WCSB-909 (2.5-3)	68	74	100	84
LCS 240-103632/18-A	Lab Control Sample	83	103	86	96
LCS 240-103651/24-A	Lab Control Sample	85	87	67	212 X
LCSD 240-103632/19-A	Lab Control Sample Dup	90	93	84	92
LCSD 240-103651/25-A	Lab Control Sample Dup	88	92	64	80
MB 240-103632/17-A	Method Blank	76	104	87	98
MB 240-103651/23-A	Method Blank	82	222 X	85	91
Surrogate Legend					

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		1COD2 (40-140)	2BN1 (40-140)	FBP1 (40-140)	OTPH1 (40-140)
480-46783-1	WCSB-11 (1-2)	53	70	83	40
480-46783-4	WCSB-7 (4-5)	83	95	110	88
480-46783-6	WCSB-8 (2-2.5)	49	109	125	48
480-46783-8	WCSB-8 (7-8)	69	104	117	74
480-46783-11	WCSB-6 (8-9)	70	98	111	86
480-46783-12	WCSB-5 (0.5-1.5)	0 X	78	107	84
480-46783-13	WCSB-5 (5-6)	84	106	131	87
480-46783-16	WCSB-4 (2.5-3)	77	99	114	90
480-46783-17	WCSB-4 (6-7)	70	97	112	80
480-46783-19	WCSB-1 (1-2)	48	104	122	53
480-46783-20	WCSB-1 (2.5-3)	65	98	113	79
480-46783-21	WCSB-1 (7-8)	71	110	124	88
480-46783-23	WCSB-3 (7-8)	59	96	113	72
480-46783-24	WCSB-9 (1-2)	65	105	123	70
LCS 480-141819/2-B	Lab Control Sample	61	99	113	94
LCSD 480-141819/3-B	Lab Control Sample Dup	62	99	107	91
MB 480-141819/1-B	Method Blank	56	95	107	92

Surrogate Legend

1COD = 1-Chlorooctadecane
2BN = 2-Bromonaphthalene
FBP = 2-Fluorobiphenyl
OTPH = o-Terphenyl

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-142036/8

Matrix: Solid

Analysis Batch: 142036

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00250		0.00250	0.000500	mg/Kg			10/01/13 13:43	1
1,1,1-Trichloroethane	<0.00250		0.00250	0.000363	mg/Kg			10/01/13 13:43	1
1,1,2,2-Tetrachloroethane	<0.00250		0.00250	0.000811	mg/Kg			10/01/13 13:43	1
1,1,2-Trichloroethane	<0.00250		0.00250	0.000650	mg/Kg			10/01/13 13:43	1
1,1-Dichloroethane	<0.00250		0.00250	0.000610	mg/Kg			10/01/13 13:43	1
1,1-Dichloroethene	<0.00250		0.00250	0.000612	mg/Kg			10/01/13 13:43	1
1,1-Dichloropropene	<0.00250		0.00250	0.000710	mg/Kg			10/01/13 13:43	1
1,2,3-Trichlorobenzene	<0.00250		0.00250	0.000531	mg/Kg			10/01/13 13:43	1
1,2,3-Trichloropropane	<0.00250		0.00250	0.000509	mg/Kg			10/01/13 13:43	1
1,2,4-Trichlorobenzene	<0.00250		0.00250	0.000304	mg/Kg			10/01/13 13:43	1
1,2,4-Trimethylbenzene	<0.00250		0.00250	0.000960	mg/Kg			10/01/13 13:43	1
1,2-Dibromo-3-Chloropropane	<0.0250		0.0250	0.00250	mg/Kg			10/01/13 13:43	1
1,2-Dichlorobenzene	<0.00250		0.00250	0.000391	mg/Kg			10/01/13 13:43	1
1,2-Dichloroethane	<0.00250		0.00250	0.000251	mg/Kg			10/01/13 13:43	1
1,2-Dichloropropane	<0.00250		0.00250	0.00250	mg/Kg			10/01/13 13:43	1
1,3,5-Trimethylbenzene	<0.00250		0.00250	0.000322	mg/Kg			10/01/13 13:43	1
1,3-Dichlorobenzene	<0.00250		0.00250	0.000257	mg/Kg			10/01/13 13:43	1
1,3-Dichloropropane	<0.00250		0.00250	0.000300	mg/Kg			10/01/13 13:43	1
1,4-Dichlorobenzene	<0.00250		0.00250	0.000700	mg/Kg			10/01/13 13:43	1
1,4-Dioxane	<0.250		0.250	0.0241	mg/Kg			10/01/13 13:43	1
2,2-Dichloropropane	<0.00250		0.00250	0.000850	mg/Kg			10/01/13 13:43	1
2-Butanone (MEK)	<0.0250		0.0250	0.00183	mg/Kg			10/01/13 13:43	1
2-Chlorotoluene	<0.00250		0.00250	0.000328	mg/Kg			10/01/13 13:43	1
2-Hexanone	<0.0250		0.0250	0.00250	mg/Kg			10/01/13 13:43	1
4-Chlorotoluene	<0.00250		0.00250	0.000590	mg/Kg			10/01/13 13:43	1
4-Isopropyltoluene	<0.00250		0.00250	0.000401	mg/Kg			10/01/13 13:43	1
4-Methyl-2-pentanone (MIBK)	<0.0250		0.0250	0.00164	mg/Kg			10/01/13 13:43	1
Acetone	<0.250		0.250	0.00421	mg/Kg			10/01/13 13:43	1
Benzene	<0.00250		0.00250	0.000245	mg/Kg			10/01/13 13:43	1
Bromobenzene	<0.00250		0.00250	0.000880	mg/Kg			10/01/13 13:43	1
Bromoform	<0.00250		0.00250	0.00250	mg/Kg			10/01/13 13:43	1
Bromomethane	<0.00500		0.00500	0.000450	mg/Kg			10/01/13 13:43	1
Carbon disulfide	<0.00250		0.00250	0.00250	mg/Kg			10/01/13 13:43	1
Carbon tetrachloride	<0.00250		0.00250	0.000484	mg/Kg			10/01/13 13:43	1
Chlorobenzene	<0.00250		0.00250	0.000660	mg/Kg			10/01/13 13:43	1
Chlorobromomethane	<0.00250		0.00250	0.000361	mg/Kg			10/01/13 13:43	1
Chlorodibromomethane	<0.00250		0.00250	0.000640	mg/Kg			10/01/13 13:43	1
Chloroethane	<0.00500		0.00500	0.00113	mg/Kg			10/01/13 13:43	1
Chloroform	<0.00250		0.00250	0.000309	mg/Kg			10/01/13 13:43	1
Chloromethane	<0.00500		0.00500	0.000302	mg/Kg			10/01/13 13:43	1
cis-1,2-Dichloroethene	<0.00250		0.00250	0.000640	mg/Kg			10/01/13 13:43	1
cis-1,3-Dichloropropene	<0.00250		0.00250	0.000720	mg/Kg			10/01/13 13:43	1
Dichlorobromomethane	<0.00250		0.00250	0.000670	mg/Kg			10/01/13 13:43	1
Dichlorodifluoromethane	<0.00500		0.00500	0.000413	mg/Kg			10/01/13 13:43	1
Ethyl ether	<0.00250		0.00250	0.00210	mg/Kg			10/01/13 13:43	1
Ethylbenzene	<0.00250		0.00250	0.000345	mg/Kg			10/01/13 13:43	1
Ethylene Dibromide	<0.00250		0.00250	0.000642	mg/Kg			10/01/13 13:43	1
Hexachlorobutadiene	<0.00250		0.00250	0.000586	mg/Kg			10/01/13 13:43	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-142036/8

Matrix: Solid

Analysis Batch: 142036

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.00250		0.00250	0.00250	mg/Kg			10/01/13 13:43	1
Isopropylbenzene	<0.00250		0.00250	0.000754	mg/Kg			10/01/13 13:43	1
Methyl tert-butyl ether	<0.00250		0.00250	0.000491	mg/Kg			10/01/13 13:43	1
Methylene Chloride	<0.00250		0.00250	0.00230	mg/Kg			10/01/13 13:43	1
m-Xylene & p-Xylene	<0.00500		0.00500	0.000840	mg/Kg			10/01/13 13:43	1
Naphthalene	<0.0250		0.0250	0.000670	mg/Kg			10/01/13 13:43	1
n-Butylbenzene	<0.00250		0.00250	0.000435	mg/Kg			10/01/13 13:43	1
N-Propylbenzene	<0.00250		0.00250	0.000400	mg/Kg			10/01/13 13:43	1
o-Xylene	<0.00250		0.00250	0.000653	mg/Kg			10/01/13 13:43	1
sec-Butylbenzene	<0.00250		0.00250	0.000435	mg/Kg			10/01/13 13:43	1
Styrene	<0.00250		0.00250	0.000250	mg/Kg			10/01/13 13:43	1
Tert-amyl methyl ether	<0.00250		0.00250	0.00128	mg/Kg			10/01/13 13:43	1
Tert-butyl ethyl ether	<0.00250		0.00250	0.00220	mg/Kg			10/01/13 13:43	1
tert-Butylbenzene	<0.00250		0.00250	0.000520	mg/Kg			10/01/13 13:43	1
Tetrachloroethene	<0.00250		0.00250	0.000671	mg/Kg			10/01/13 13:43	1
Tetrahydrofuran	<0.0500		0.0500	0.00460	mg/Kg			10/01/13 13:43	1
Toluene	<0.00250		0.00250	0.000378	mg/Kg			10/01/13 13:43	1
trans-1,2-Dichloroethene	<0.00250		0.00250	0.000516	mg/Kg			10/01/13 13:43	1
trans-1,3-Dichloropropene	<0.00250		0.00250	0.00220	mg/Kg			10/01/13 13:43	1
Trichloroethene	<0.00250		0.00250	0.00110	mg/Kg			10/01/13 13:43	1
Trichlorofluoromethane	<0.00500		0.00500	0.000473	mg/Kg			10/01/13 13:43	1
Vinyl chloride	<0.00250		0.00250	0.000610	mg/Kg			10/01/13 13:43	1
Dibromomethane	<0.00250		0.00250	0.000515	mg/Kg			10/01/13 13:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		10/01/13 13:43	1
1,2-Dichloroethane-d4 (Surr)	90		70 - 130		10/01/13 13:43	1
4-Bromofluorobenzene (Surr)	116		70 - 130		10/01/13 13:43	1

Lab Sample ID: LCS 480-142036/6

Matrix: Solid

Analysis Batch: 142036

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0500	0.06068		mg/Kg		121	70 - 130
1,1,1-Trichloroethane	0.0500	0.05196		mg/Kg		104	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.04747		mg/Kg		95	70 - 130
1,1,2-Trichloroethane	0.0500	0.04891		mg/Kg		98	70 - 130
1,1-Dichloroethane	0.0500	0.04649		mg/Kg		93	70 - 130
1,1-Dichloroethene	0.0500	0.04547		mg/Kg		91	70 - 130
1,1-Dichloropropene	0.0500	0.04561		mg/Kg		91	70 - 130
1,2,3-Trichlorobenzene	0.0500	0.06236		mg/Kg		125	70 - 130
1,2,3-Trichloropropane	0.0500	0.05268		mg/Kg		105	70 - 130
1,2,4-Trichlorobenzene	0.0500	0.05931		mg/Kg		119	70 - 130
1,2,4-Trimethylbenzene	0.0500	0.04897		mg/Kg		98	70 - 130
1,2-Dibromo-3-Chloropropane	0.0500	0.04791		mg/Kg		96	70 - 130
1,2-Dichlorobenzene	0.0500	0.05327		mg/Kg		107	70 - 130
1,2-Dichloroethane	0.0500	0.04865		mg/Kg		97	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-142036/6

Matrix: Solid

Analysis Batch: 142036

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.0500	0.04562		mg/Kg		91	70 - 130
1,3,5-Trimethylbenzene	0.0500	0.05039		mg/Kg		101	70 - 130
1,3-Dichlorobenzene	0.0500	0.05173		mg/Kg		103	70 - 130
1,3-Dichloropropane	0.0500	0.05031		mg/Kg		101	70 - 130
1,4-Dichlorobenzene	0.0500	0.04955		mg/Kg		99	70 - 130
1,4-Dioxane	2.00	1.915		mg/Kg		96	70 - 130
2,2-Dichloropropane	0.0500	0.04993		mg/Kg		100	70 - 130
2-Butanone (MEK)	0.250	0.2957		mg/Kg		118	70 - 130
2-Chlorotoluene	0.0500	0.05127		mg/Kg		103	70 - 130
2-Hexanone	0.250	0.2300		mg/Kg		92	70 - 130
4-Chlorotoluene	0.0500	0.05434		mg/Kg		109	70 - 130
4-Isopropyltoluene	0.0500	0.05206		mg/Kg		104	70 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2296		mg/Kg		92	70 - 130
Acetone	0.250	0.2328	J	mg/Kg		93	70 - 130
Benzene	0.0500	0.04632		mg/Kg		93	70 - 130
Bromobenzene	0.0500	0.05173		mg/Kg		103	70 - 130
Bromoform	0.0500	0.05374		mg/Kg		107	70 - 130
Bromomethane	0.0500	0.04778		mg/Kg		96	70 - 130
Carbon disulfide	0.0500	0.04859		mg/Kg		97	70 - 130
Carbon tetrachloride	0.0500	0.05663		mg/Kg		113	70 - 130
Chlorobenzene	0.0500	0.05182		mg/Kg		104	70 - 130
Chlorobromomethane	0.0500	0.05173		mg/Kg		103	70 - 130
Chlorodibromomethane	0.0500	0.05413		mg/Kg		108	70 - 130
Chloroethane	0.0500	0.04242		mg/Kg		85	70 - 130
Chloroform	0.0500	0.04818		mg/Kg		96	70 - 130
Chloromethane	0.0500	0.03516		mg/Kg		70	70 - 130
cis-1,2-Dichloroethene	0.0500	0.04728		mg/Kg		95	70 - 130
cis-1,3-Dichloropropene	0.0500	0.05141		mg/Kg		103	70 - 130
Dichlorobromomethane	0.0500	0.05412		mg/Kg		108	70 - 130
Dichlorodifluoromethane	0.100	0.08419		mg/Kg		84	70 - 130
Ethyl ether	0.0500	0.03766		mg/Kg		75	70 - 130
Ethylbenzene	0.0500	0.05099		mg/Kg		102	70 - 130
Ethylene Dibromide	0.0500	0.05392		mg/Kg		108	70 - 130
Hexachlorobutadiene	0.0500	0.05780		mg/Kg		116	70 - 130
Isopropyl ether	0.0500	0.04282		mg/Kg		86	70 - 130
Isopropylbenzene	0.0500	0.04938		mg/Kg		99	70 - 130
Methyl tert-butyl ether	0.0500	0.04624		mg/Kg		92	70 - 130
Methylene Chloride	0.0500	0.04288		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	0.100	0.1042		mg/Kg		104	70 - 130
Naphthalene	0.0500	0.05309		mg/Kg		106	70 - 130
n-Butylbenzene	0.0500	0.05007		mg/Kg		100	70 - 130
N-Propylbenzene	0.0500	0.04647		mg/Kg		93	70 - 130
o-Xylene	0.0500	0.05239		mg/Kg		105	70 - 130
sec-Butylbenzene	0.0500	0.05026		mg/Kg		101	70 - 130
Styrene	0.0500	0.05342		mg/Kg		107	70 - 130
Tert-amyl methyl ether	0.0500	0.04842		mg/Kg		97	70 - 130
Tert-butyl ethyl ether	0.0500	0.04554		mg/Kg		91	70 - 130
tert-Butylbenzene	0.0500	0.05111		mg/Kg		102	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-142036/6

Matrix: Solid

Analysis Batch: 142036

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	0.0500	0.06682	*	mg/Kg		134	70 - 130
Tetrahydrofuran	0.250	0.2026		mg/Kg		81	70 - 130
Toluene	0.0500	0.04996		mg/Kg		100	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04717		mg/Kg		94	70 - 130
trans-1,3-Dichloropropene	0.0500	0.05414		mg/Kg		108	70 - 130
Trichloroethene	0.0500	0.04741		mg/Kg		95	70 - 130
Trichlorofluoromethane	0.0500	0.04952		mg/Kg		99	70 - 130
Vinyl chloride	0.0500	0.04307		mg/Kg		86	70 - 130
Dibromomethane	0.0500	0.05026		mg/Kg		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	93		70 - 130
4-Bromofluorobenzene (Surr)	120		70 - 130

Lab Sample ID: LCSD 480-142036/7

Matrix: Solid

Analysis Batch: 142036

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0500	0.05921		mg/Kg		118	70 - 130	2	20
1,1,1-Trichloroethane	0.0500	0.04950		mg/Kg		99	70 - 130	5	20
1,1,2,2-Tetrachloroethane	0.0500	0.04823		mg/Kg		96	70 - 130	2	20
1,1,2-Trichloroethane	0.0500	0.04997		mg/Kg		100	70 - 130	2	20
1,1-Dichloroethane	0.0500	0.04531		mg/Kg		91	70 - 130	3	20
1,1-Dichloroethene	0.0500	0.04311		mg/Kg		86	70 - 130	5	20
1,1-Dichloropropene	0.0500	0.04450		mg/Kg		89	70 - 130	2	20
1,2,3-Trichlorobenzene	0.0500	0.05871		mg/Kg		117	70 - 130	6	20
1,2,3-Trichloropropane	0.0500	0.05465		mg/Kg		109	70 - 130	4	20
1,2,4-Trichlorobenzene	0.0500	0.05505		mg/Kg		110	70 - 130	7	20
1,2,4-Trimethylbenzene	0.0500	0.04622		mg/Kg		92	70 - 130	6	20
1,2-Dibromo-3-Chloropropane	0.0500	0.05013		mg/Kg		100	70 - 130	5	20
1,2-Dichlorobenzene	0.0500	0.05113		mg/Kg		102	70 - 130	4	20
1,2-Dichloroethane	0.0500	0.04806		mg/Kg		96	70 - 130	1	20
1,2-Dichloropropane	0.0500	0.04434		mg/Kg		89	70 - 130	3	20
1,3,5-Trimethylbenzene	0.0500	0.04823		mg/Kg		96	70 - 130	4	20
1,3-Dichlorobenzene	0.0500	0.04953		mg/Kg		99	70 - 130	4	20
1,3-Dichloropropane	0.0500	0.05048		mg/Kg		101	70 - 130	0	20
1,4-Dichlorobenzene	0.0500	0.04780		mg/Kg		96	70 - 130	4	20
1,4-Dioxane	2.00	1.640		mg/Kg		82	70 - 130	15	20
2,2-Dichloropropane	0.0500	0.04789		mg/Kg		96	70 - 130	4	20
2-Butanone (MEK)	0.250	0.3152		mg/Kg		126	70 - 130	6	20
2-Chlorotoluene	0.0500	0.04889		mg/Kg		98	70 - 130	5	20
2-Hexanone	0.250	0.2461		mg/Kg		98	70 - 130	7	20
4-Chlorotoluene	0.0500	0.04831		mg/Kg		97	70 - 130	12	20
4-Isopropyltoluene	0.0500	0.04948		mg/Kg		99	70 - 130	5	20
4-Methyl-2-pentanone (MIBK)	0.250	0.2444		mg/Kg		98	70 - 130	6	20
Acetone	0.250	0.2617		mg/Kg		105	70 - 130	12	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-142036/7

Matrix: Solid

Analysis Batch: 142036

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04537		mg/Kg		91	70 - 130	2	20
Bromobenzene	0.0500	0.05034		mg/Kg		101	70 - 130	3	20
Bromoform	0.0500	0.05515		mg/Kg		110	70 - 130	3	20
Bromomethane	0.0500	0.04602		mg/Kg		92	70 - 130	4	20
Carbon disulfide	0.0500	0.04589		mg/Kg		92	70 - 130	6	20
Carbon tetrachloride	0.0500	0.05381		mg/Kg		108	70 - 130	5	20
Chlorobenzene	0.0500	0.05101		mg/Kg		102	70 - 130	2	20
Chlorobromomethane	0.0500	0.05130		mg/Kg		103	70 - 130	1	20
Chlorodibromomethane	0.0500	0.05336		mg/Kg		107	70 - 130	1	20
Chloroethane	0.0500	0.04161		mg/Kg		83	70 - 130	2	20
Chloroform	0.0500	0.04707		mg/Kg		94	70 - 130	2	20
Chloromethane	0.0500	0.03351	*	mg/Kg		67	70 - 130	5	20
cis-1,2-Dichloroethene	0.0500	0.04635		mg/Kg		93	70 - 130	2	20
cis-1,3-Dichloropropene	0.0500	0.05180		mg/Kg		104	70 - 130	1	20
Dichlorobromomethane	0.0500	0.05384		mg/Kg		108	70 - 130	1	20
Dichlorodifluoromethane	0.100	0.07644		mg/Kg		76	70 - 130	10	20
Ethyl ether	0.0500	0.03956		mg/Kg		79	70 - 130	5	20
Ethylbenzene	0.0500	0.05016		mg/Kg		100	70 - 130	2	20
Ethylene Dibromide	0.0500	0.05449		mg/Kg		109	70 - 130	1	20
Hexachlorobutadiene	0.0500	0.05179		mg/Kg		104	70 - 130	11	20
Isopropyl ether	0.0500	0.04264		mg/Kg		85	70 - 130	0	20
Isopropylbenzene	0.0500	0.04768		mg/Kg		95	70 - 130	3	20
Methyl tert-butyl ether	0.0500	0.04594		mg/Kg		92	70 - 130	1	20
Methylene Chloride	0.0500	0.04152		mg/Kg		83	70 - 130	3	20
m-Xylene & p-Xylene	0.100	0.1012		mg/Kg		101	70 - 130	3	20
Naphthalene	0.0500	0.05265		mg/Kg		105	70 - 130	1	20
n-Butylbenzene	0.0500	0.04700		mg/Kg		94	70 - 130	6	20
N-Propylbenzene	0.0500	0.04455		mg/Kg		89	70 - 130	4	20
o-Xylene	0.0500	0.05071		mg/Kg		101	70 - 130	3	20
sec-Butylbenzene	0.0500	0.04732		mg/Kg		95	70 - 130	6	20
Styrene	0.0500	0.05213		mg/Kg		104	70 - 130	2	20
Tert-amyl methyl ether	0.0500	0.04879		mg/Kg		98	70 - 130	1	20
Tert-butyl ethyl ether	0.0500	0.04612		mg/Kg		92	70 - 130	1	20
tert-Butylbenzene	0.0500	0.04943		mg/Kg		99	70 - 130	3	20
Tetrachloroethene	0.0500	0.06666	*	mg/Kg		133	70 - 130	0	20
Tetrahydrofuran	0.250	0.2142		mg/Kg		86	70 - 130	6	20
Toluene	0.0500	0.04874		mg/Kg		97	70 - 130	2	20
trans-1,2-Dichloroethene	0.0500	0.04554		mg/Kg		91	70 - 130	4	20
trans-1,3-Dichloropropene	0.0500	0.05448		mg/Kg		109	70 - 130	1	20
Trichloroethene	0.0500	0.04605		mg/Kg		92	70 - 130	3	20
Trichlorofluoromethane	0.0500	0.04728		mg/Kg		95	70 - 130	5	20
Vinyl chloride	0.0500	0.04049		mg/Kg		81	70 - 130	6	20
Dibromomethane	0.0500	0.05114		mg/Kg		102	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	101		70 - 130
1,2-Dichloroethane-d4 (Surr)	93		70 - 130
4-Bromofluorobenzene (Surr)	119		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-142288/6

Matrix: Solid

Analysis Batch: 142288

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00250		0.00250	0.000500	mg/Kg			10/02/13 13:16	1
1,1,1-Trichloroethane	<0.00250		0.00250	0.000363	mg/Kg			10/02/13 13:16	1
1,1,2,2-Tetrachloroethane	<0.00250		0.00250	0.000811	mg/Kg			10/02/13 13:16	1
1,1,2-Trichloroethane	<0.00250		0.00250	0.000650	mg/Kg			10/02/13 13:16	1
1,1-Dichloroethane	<0.00250		0.00250	0.000610	mg/Kg			10/02/13 13:16	1
1,1-Dichloroethene	<0.00250		0.00250	0.000612	mg/Kg			10/02/13 13:16	1
1,1-Dichloropropene	<0.00250		0.00250	0.000710	mg/Kg			10/02/13 13:16	1
1,2,3-Trichlorobenzene	<0.00250		0.00250	0.000531	mg/Kg			10/02/13 13:16	1
1,2,3-Trichloropropane	<0.00250		0.00250	0.000509	mg/Kg			10/02/13 13:16	1
1,2,4-Trichlorobenzene	<0.00250		0.00250	0.000304	mg/Kg			10/02/13 13:16	1
1,2,4-Trimethylbenzene	<0.00250		0.00250	0.000960	mg/Kg			10/02/13 13:16	1
1,2-Dibromo-3-Chloropropane	<0.0250		0.0250	0.00250	mg/Kg			10/02/13 13:16	1
1,2-Dichlorobenzene	<0.00250		0.00250	0.000391	mg/Kg			10/02/13 13:16	1
1,2-Dichloroethane	<0.00250		0.00250	0.000251	mg/Kg			10/02/13 13:16	1
1,2-Dichloropropane	<0.00250		0.00250	0.00250	mg/Kg			10/02/13 13:16	1
1,3,5-Trimethylbenzene	<0.00250		0.00250	0.000322	mg/Kg			10/02/13 13:16	1
1,3-Dichlorobenzene	<0.00250		0.00250	0.000257	mg/Kg			10/02/13 13:16	1
1,3-Dichloropropane	<0.00250		0.00250	0.000300	mg/Kg			10/02/13 13:16	1
1,4-Dichlorobenzene	<0.00250		0.00250	0.000700	mg/Kg			10/02/13 13:16	1
1,4-Dioxane	<0.250		0.250	0.0241	mg/Kg			10/02/13 13:16	1
2,2-Dichloropropane	<0.00250		0.00250	0.000850	mg/Kg			10/02/13 13:16	1
2-Butanone (MEK)	<0.0250		0.0250	0.00183	mg/Kg			10/02/13 13:16	1
2-Chlorotoluene	<0.00250		0.00250	0.000328	mg/Kg			10/02/13 13:16	1
2-Hexanone	<0.0250		0.0250	0.00250	mg/Kg			10/02/13 13:16	1
4-Chlorotoluene	<0.00250		0.00250	0.000590	mg/Kg			10/02/13 13:16	1
4-Isopropyltoluene	<0.00250		0.00250	0.000401	mg/Kg			10/02/13 13:16	1
4-Methyl-2-pentanone (MIBK)	<0.0250		0.0250	0.00164	mg/Kg			10/02/13 13:16	1
Acetone	<0.250		0.250	0.00421	mg/Kg			10/02/13 13:16	1
Benzene	<0.00250		0.00250	0.000245	mg/Kg			10/02/13 13:16	1
Bromobenzene	<0.00250		0.00250	0.000880	mg/Kg			10/02/13 13:16	1
Bromoform	<0.00250		0.00250	0.00250	mg/Kg			10/02/13 13:16	1
Bromomethane	<0.00500		0.00500	0.000450	mg/Kg			10/02/13 13:16	1
Carbon disulfide	<0.00250		0.00250	0.00250	mg/Kg			10/02/13 13:16	1
Carbon tetrachloride	<0.00250		0.00250	0.000484	mg/Kg			10/02/13 13:16	1
Chlorobenzene	<0.00250		0.00250	0.000660	mg/Kg			10/02/13 13:16	1
Chlorobromomethane	<0.00250		0.00250	0.000361	mg/Kg			10/02/13 13:16	1
Chlorodibromomethane	<0.00250		0.00250	0.000640	mg/Kg			10/02/13 13:16	1
Chloroethane	<0.00500		0.00500	0.00113	mg/Kg			10/02/13 13:16	1
Chloroform	<0.00250		0.00250	0.000309	mg/Kg			10/02/13 13:16	1
Chloromethane	<0.00500		0.00500	0.000302	mg/Kg			10/02/13 13:16	1
cis-1,2-Dichloroethene	<0.00250		0.00250	0.000640	mg/Kg			10/02/13 13:16	1
cis-1,3-Dichloropropene	<0.00250		0.00250	0.000720	mg/Kg			10/02/13 13:16	1
Dichlorobromomethane	<0.00250		0.00250	0.000670	mg/Kg			10/02/13 13:16	1
Dichlorodifluoromethane	<0.00500		0.00500	0.000413	mg/Kg			10/02/13 13:16	1
Ethyl ether	<0.00250		0.00250	0.00210	mg/Kg			10/02/13 13:16	1
Ethylbenzene	<0.00250		0.00250	0.000345	mg/Kg			10/02/13 13:16	1
Ethylene Dibromide	<0.00250		0.00250	0.000642	mg/Kg			10/02/13 13:16	1
Hexachlorobutadiene	<0.00250		0.00250	0.000586	mg/Kg			10/02/13 13:16	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-142288/6

Matrix: Solid

Analysis Batch: 142288

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.00250		0.00250	0.00250	mg/Kg			10/02/13 13:16	1
Isopropylbenzene	<0.00250		0.00250	0.000754	mg/Kg			10/02/13 13:16	1
Methyl tert-butyl ether	<0.00250		0.00250	0.000491	mg/Kg			10/02/13 13:16	1
Methylene Chloride	<0.00250		0.00250	0.00230	mg/Kg			10/02/13 13:16	1
m-Xylene & p-Xylene	<0.00500		0.00500	0.000840	mg/Kg			10/02/13 13:16	1
Naphthalene	<0.0250		0.0250	0.000670	mg/Kg			10/02/13 13:16	1
n-Butylbenzene	<0.00250		0.00250	0.000435	mg/Kg			10/02/13 13:16	1
N-Propylbenzene	<0.00250		0.00250	0.000400	mg/Kg			10/02/13 13:16	1
o-Xylene	<0.00250		0.00250	0.000653	mg/Kg			10/02/13 13:16	1
sec-Butylbenzene	<0.00250		0.00250	0.000435	mg/Kg			10/02/13 13:16	1
Styrene	<0.00250		0.00250	0.000250	mg/Kg			10/02/13 13:16	1
Tert-amyl methyl ether	<0.00250		0.00250	0.00128	mg/Kg			10/02/13 13:16	1
Tert-butyl ethyl ether	<0.00250		0.00250	0.00220	mg/Kg			10/02/13 13:16	1
tert-Butylbenzene	<0.00250		0.00250	0.000520	mg/Kg			10/02/13 13:16	1
Tetrachloroethene	<0.00250		0.00250	0.000671	mg/Kg			10/02/13 13:16	1
Tetrahydrofuran	<0.0500		0.0500	0.00460	mg/Kg			10/02/13 13:16	1
Toluene	<0.00250		0.00250	0.000378	mg/Kg			10/02/13 13:16	1
trans-1,2-Dichloroethene	<0.00250		0.00250	0.000516	mg/Kg			10/02/13 13:16	1
trans-1,3-Dichloropropene	<0.00250		0.00250	0.00220	mg/Kg			10/02/13 13:16	1
Trichloroethene	<0.00250		0.00250	0.00110	mg/Kg			10/02/13 13:16	1
Trichlorofluoromethane	<0.00500		0.00500	0.000473	mg/Kg			10/02/13 13:16	1
Vinyl chloride	<0.00250		0.00250	0.000610	mg/Kg			10/02/13 13:16	1
Dibromomethane	<0.00250		0.00250	0.000515	mg/Kg			10/02/13 13:16	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		10/02/13 13:16	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		10/02/13 13:16	1
4-Bromofluorobenzene (Surr)	97		70 - 130		10/02/13 13:16	1

Lab Sample ID: LCS 480-142288/4

Matrix: Solid

Analysis Batch: 142288

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0500	0.04894		mg/Kg		98	70 - 130
1,1,1-Trichloroethane	0.0500	0.04710		mg/Kg		94	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.04912		mg/Kg		98	70 - 130
1,1,2-Trichloroethane	0.0500	0.04747		mg/Kg		95	70 - 130
1,1-Dichloroethane	0.0500	0.04872		mg/Kg		97	70 - 130
1,1-Dichloroethene	0.0500	0.04708		mg/Kg		94	70 - 130
1,1-Dichloropropene	0.0500	0.04763		mg/Kg		95	70 - 130
1,2,3-Trichlorobenzene	0.0500	0.04963		mg/Kg		99	70 - 130
1,2,3-Trichloropropane	0.0500	0.04773		mg/Kg		95	70 - 130
1,2,4-Trichlorobenzene	0.0500	0.05038		mg/Kg		101	70 - 130
1,2,4-Trimethylbenzene	0.0500	0.04797		mg/Kg		96	70 - 130
1,2-Dibromo-3-Chloropropane	0.0500	0.04509		mg/Kg		90	70 - 130
1,2-Dichlorobenzene	0.0500	0.04698		mg/Kg		94	70 - 130
1,2-Dichloroethane	0.0500	0.04783		mg/Kg		96	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-142288/4

Matrix: Solid

Analysis Batch: 142288

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.0500	0.04830		mg/Kg		97	70 - 130
1,3,5-Trimethylbenzene	0.0500	0.04695		mg/Kg		94	70 - 130
1,3-Dichlorobenzene	0.0500	0.04629		mg/Kg		93	70 - 130
1,3-Dichloropropane	0.0500	0.04771		mg/Kg		95	70 - 130
1,4-Dichlorobenzene	0.0500	0.04485		mg/Kg		90	70 - 130
1,4-Dioxane	2.00	1.643		mg/Kg		82	70 - 130
2,2-Dichloropropane	0.0500	0.04732		mg/Kg		95	70 - 130
2-Butanone (MEK)	0.250	0.3257		mg/Kg		130	70 - 130
2-Chlorotoluene	0.0500	0.04796		mg/Kg		96	70 - 130
2-Hexanone	0.250	0.2361		mg/Kg		94	70 - 130
4-Chlorotoluene	0.0500	0.04792		mg/Kg		96	70 - 130
4-Isopropyltoluene	0.0500	0.04773		mg/Kg		95	70 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2363		mg/Kg		95	70 - 130
Acetone	0.250	0.2493	J	mg/Kg		100	70 - 130
Benzene	0.0500	0.04699		mg/Kg		94	70 - 130
Bromobenzene	0.0500	0.04767		mg/Kg		95	70 - 130
Bromoform	0.0500	0.04385		mg/Kg		88	70 - 130
Bromomethane	0.0500	0.04493		mg/Kg		90	70 - 130
Carbon disulfide	0.0500	0.05708		mg/Kg		114	70 - 130
Carbon tetrachloride	0.0500	0.04715		mg/Kg		94	70 - 130
Chlorobenzene	0.0500	0.04396		mg/Kg		88	70 - 130
Chlorobromomethane	0.0500	0.04974		mg/Kg		99	70 - 130
Chlorodibromomethane	0.0500	0.04979		mg/Kg		100	70 - 130
Chloroethane	0.0500	0.04800		mg/Kg		96	70 - 130
Chloroform	0.0500	0.04698		mg/Kg		94	70 - 130
Chloromethane	0.0500	0.04593		mg/Kg		92	70 - 130
cis-1,2-Dichloroethene	0.0500	0.04785		mg/Kg		96	70 - 130
cis-1,3-Dichloropropene	0.0500	0.05083		mg/Kg		102	70 - 130
Dichlorobromomethane	0.0500	0.04885		mg/Kg		98	70 - 130
Dichlorodifluoromethane	0.100	0.1241		mg/Kg		124	70 - 130
Ethyl ether	0.0500	0.04639		mg/Kg		93	70 - 130
Ethylbenzene	0.0500	0.04652		mg/Kg		93	70 - 130
Ethylene Dibromide	0.0500	0.04854		mg/Kg		97	70 - 130
Hexachlorobutadiene	0.0500	0.04692		mg/Kg		94	70 - 130
Isopropyl ether	0.0500	0.04935		mg/Kg		99	70 - 130
Isopropylbenzene	0.0500	0.04760		mg/Kg		95	70 - 130
Methyl tert-butyl ether	0.0500	0.04901		mg/Kg		98	70 - 130
Methylene Chloride	0.0500	0.04697		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.100	0.09299		mg/Kg		93	70 - 130
Naphthalene	0.0500	0.04926		mg/Kg		99	70 - 130
n-Butylbenzene	0.0500	0.04823		mg/Kg		96	70 - 130
N-Propylbenzene	0.0500	0.04732		mg/Kg		95	70 - 130
o-Xylene	0.0500	0.04751		mg/Kg		95	70 - 130
sec-Butylbenzene	0.0500	0.04700		mg/Kg		94	70 - 130
Styrene	0.0500	0.04828		mg/Kg		97	70 - 130
Tert-amyl methyl ether	0.0500	0.05025		mg/Kg		101	70 - 130
Tert-butyl ethyl ether	0.0500	0.04939		mg/Kg		99	70 - 130
tert-Butylbenzene	0.0500	0.04717		mg/Kg		94	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-142288/4

Matrix: Solid

Analysis Batch: 142288

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	0.0500	0.05257		mg/Kg		105	70 - 130
Tetrahydrofuran	0.250	0.2326		mg/Kg		93	70 - 130
Toluene	0.0500	0.04615		mg/Kg		92	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04753		mg/Kg		95	70 - 130
trans-1,3-Dichloropropene	0.0500	0.04956		mg/Kg		99	70 - 130
Trichloroethene	0.0500	0.04734		mg/Kg		95	70 - 130
Trichlorofluoromethane	0.0500	0.04674		mg/Kg		93	70 - 130
Vinyl chloride	0.0500	0.04654		mg/Kg		93	70 - 130
Dibromomethane	0.0500	0.04887		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	98		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 480-142288/5

Matrix: Solid

Analysis Batch: 142288

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0500	0.04967		mg/Kg		99	70 - 130	1	20
1,1,1-Trichloroethane	0.0500	0.04731		mg/Kg		95	70 - 130	0	20
1,1,2,2-Tetrachloroethane	0.0500	0.05111		mg/Kg		102	70 - 130	4	20
1,1,2-Trichloroethane	0.0500	0.04938		mg/Kg		99	70 - 130	4	20
1,1-Dichloroethane	0.0500	0.04860		mg/Kg		97	70 - 130	0	20
1,1-Dichloroethene	0.0500	0.04669		mg/Kg		93	70 - 130	1	20
1,1-Dichloropropene	0.0500	0.04794		mg/Kg		96	70 - 130	1	20
1,2,3-Trichlorobenzene	0.0500	0.05067		mg/Kg		101	70 - 130	2	20
1,2,3-Trichloropropane	0.0500	0.05010		mg/Kg		100	70 - 130	5	20
1,2,4-Trichlorobenzene	0.0500	0.05038		mg/Kg		101	70 - 130	0	20
1,2,4-Trimethylbenzene	0.0500	0.04703		mg/Kg		94	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	0.0500	0.04994		mg/Kg		100	70 - 130	10	20
1,2-Dichlorobenzene	0.0500	0.04699		mg/Kg		94	70 - 130	0	20
1,2-Dichloroethane	0.0500	0.04847		mg/Kg		97	70 - 130	1	20
1,2-Dichloropropane	0.0500	0.04908		mg/Kg		98	70 - 130	2	20
1,3,5-Trimethylbenzene	0.0500	0.04632		mg/Kg		93	70 - 130	1	20
1,3-Dichlorobenzene	0.0500	0.04612		mg/Kg		92	70 - 130	0	20
1,3-Dichloropropane	0.0500	0.04919		mg/Kg		98	70 - 130	3	20
1,4-Dichlorobenzene	0.0500	0.04470		mg/Kg		89	70 - 130	0	20
1,4-Dioxane	2.00	1.962		mg/Kg		98	70 - 130	18	20
2,2-Dichloropropane	0.0500	0.04774		mg/Kg		95	70 - 130	1	20
2-Butanone (MEK)	0.250	0.3695	*	mg/Kg		148	70 - 130	13	20
2-Chlorotoluene	0.0500	0.04721		mg/Kg		94	70 - 130	2	20
2-Hexanone	0.250	0.2725		mg/Kg		109	70 - 130	14	20
4-Chlorotoluene	0.0500	0.04830		mg/Kg		97	70 - 130	1	20
4-Isopropyltoluene	0.0500	0.04691		mg/Kg		94	70 - 130	2	20
4-Methyl-2-pentanone (MIBK)	0.250	0.2649		mg/Kg		106	70 - 130	11	20
Acetone	0.250	0.2887		mg/Kg		115	70 - 130	15	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-142288/5

Matrix: Solid

Analysis Batch: 142288

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04738		mg/Kg		95	70 - 130	1	20
Bromobenzene	0.0500	0.04811		mg/Kg		96	70 - 130	1	20
Bromoform	0.0500	0.04587		mg/Kg		92	70 - 130	5	20
Bromomethane	0.0500	0.04474		mg/Kg		89	70 - 130	0	20
Carbon disulfide	0.0500	0.05709		mg/Kg		114	70 - 130	0	20
Carbon tetrachloride	0.0500	0.04750		mg/Kg		95	70 - 130	1	20
Chlorobenzene	0.0500	0.04412		mg/Kg		88	70 - 130	0	20
Chlorobromomethane	0.0500	0.05026		mg/Kg		101	70 - 130	1	20
Chlorodibromomethane	0.0500	0.05200		mg/Kg		104	70 - 130	4	20
Chloroethane	0.0500	0.04528		mg/Kg		91	70 - 130	6	20
Chloroform	0.0500	0.04755		mg/Kg		95	70 - 130	1	20
Chloromethane	0.0500	0.04540		mg/Kg		91	70 - 130	1	20
cis-1,2-Dichloroethene	0.0500	0.04792		mg/Kg		96	70 - 130	0	20
cis-1,3-Dichloropropene	0.0500	0.05176		mg/Kg		104	70 - 130	2	20
Dichlorobromomethane	0.0500	0.05009		mg/Kg		100	70 - 130	3	20
Dichlorodifluoromethane	0.100	0.1205		mg/Kg		120	70 - 130	3	20
Ethyl ether	0.0500	0.04586		mg/Kg		92	70 - 130	1	20
Ethylbenzene	0.0500	0.04672		mg/Kg		93	70 - 130	0	20
Ethylene Dibromide	0.0500	0.04995		mg/Kg		100	70 - 130	3	20
Hexachlorobutadiene	0.0500	0.04546		mg/Kg		91	70 - 130	3	20
Isopropyl ether	0.0500	0.05033		mg/Kg		101	70 - 130	2	20
Isopropylbenzene	0.0500	0.04674		mg/Kg		93	70 - 130	2	20
Methyl tert-butyl ether	0.0500	0.05168		mg/Kg		103	70 - 130	5	20
Methylene Chloride	0.0500	0.04685		mg/Kg		94	70 - 130	0	20
m-Xylene & p-Xylene	0.100	0.09339		mg/Kg		93	70 - 130	0	20
Naphthalene	0.0500	0.05232		mg/Kg		105	70 - 130	6	20
n-Butylbenzene	0.0500	0.04730		mg/Kg		95	70 - 130	2	20
N-Propylbenzene	0.0500	0.04628		mg/Kg		93	70 - 130	2	20
o-Xylene	0.0500	0.04757		mg/Kg		95	70 - 130	0	20
sec-Butylbenzene	0.0500	0.04611		mg/Kg		92	70 - 130	2	20
Styrene	0.0500	0.04913		mg/Kg		98	70 - 130	2	20
Tert-amyl methyl ether	0.0500	0.05168		mg/Kg		103	70 - 130	3	20
Tert-butyl ethyl ether	0.0500	0.04997		mg/Kg		100	70 - 130	1	20
tert-Butylbenzene	0.0500	0.04713		mg/Kg		94	70 - 130	0	20
Tetrachloroethene	0.0500	0.05599		mg/Kg		112	70 - 130	6	20
Tetrahydrofuran	0.250	0.2674		mg/Kg		107	70 - 130	14	20
Toluene	0.0500	0.04655		mg/Kg		93	70 - 130	1	20
trans-1,2-Dichloroethene	0.0500	0.04734		mg/Kg		95	70 - 130	0	20
trans-1,3-Dichloropropene	0.0500	0.05064		mg/Kg		101	70 - 130	2	20
Trichloroethene	0.0500	0.04718		mg/Kg		94	70 - 130	0	20
Trichlorofluoromethane	0.0500	0.04381		mg/Kg		88	70 - 130	6	20
Vinyl chloride	0.0500	0.04770		mg/Kg		95	70 - 130	2	20
Dibromomethane	0.0500	0.05038		mg/Kg		101	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-142564/12-A

Matrix: Solid

Analysis Batch: 142727

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 142564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.125		0.125	0.0250	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,1,1-Trichloroethane	<0.125		0.125	0.0182	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,1,2,2-Tetrachloroethane	<0.125		0.125	0.0406	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,1,2-Trichloroethane	<0.125		0.125	0.0325	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,1-Dichloroethane	<0.125		0.125	0.0305	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,1-Dichloroethene	<0.125		0.125	0.0306	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,1-Dichloropropene	<0.125		0.125	0.0355	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,2,3-Trichlorobenzene	<0.125		0.125	0.0266	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,2,3-Trichloropropane	<0.125		0.125	0.0255	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,2,4-Trichlorobenzene	<0.125		0.125	0.0152	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,2,4-Trimethylbenzene	<0.125		0.125	0.0480	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,2-Dibromo-3-Chloropropane	<1.25		1.25	0.125	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,2-Dichlorobenzene	<0.125		0.125	0.0196	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,2-Dichloroethane	<0.125		0.125	0.0126	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,2-Dichloropropane	<0.125		0.125	0.125	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,3,5-Trimethylbenzene	<0.125		0.125	0.0161	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,3-Dichlorobenzene	<0.125		0.125	0.0129	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,3-Dichloropropane	<0.125		0.125	0.0150	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,4-Dichlorobenzene	<0.125		0.125	0.0350	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
1,4-Dioxane	<12.5		12.5	1.21	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
2,2-Dichloropropane	<0.125		0.125	0.0425	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
2-Butanone (MEK)	<1.25		1.25	0.0915	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
2-Chlorotoluene	<0.125		0.125	0.0164	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
2-Hexanone	<1.25		1.25	0.125	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
4-Chlorotoluene	<0.125		0.125	0.0295	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
4-Isopropyltoluene	<0.125		0.125	0.0201	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
4-Methyl-2-pentanone (MIBK)	<1.25		1.25	0.0820	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Acetone	<12.5		12.5	0.211	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Benzene	<0.125		0.125	0.0123	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Bromobenzene	<0.125		0.125	0.0440	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Bromoform	<0.125		0.125	0.125	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Bromomethane	<0.250		0.250	0.0225	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Carbon disulfide	<0.125		0.125	0.125	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Carbon tetrachloride	<0.125		0.125	0.0242	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Chlorobenzene	<0.125		0.125	0.0330	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Chlorobromomethane	<0.125		0.125	0.0181	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Chlorodibromomethane	<0.125		0.125	0.0320	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Chloroethane	<0.250		0.250	0.0565	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Chloroform	<0.125		0.125	0.0155	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Chloromethane	<0.250		0.250	0.0151	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
cis-1,2-Dichloroethene	<0.125		0.125	0.0320	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
cis-1,3-Dichloropropene	<0.125		0.125	0.0360	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Dichlorobromomethane	<0.125		0.125	0.0335	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Dichlorodifluoromethane	<0.250		0.250	0.0207	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Ethyl ether	<0.125		0.125	0.105	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Ethylbenzene	<0.125		0.125	0.0173	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Ethylene Dibromide	<0.125		0.125	0.0321	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Hexachlorobutadiene	<0.125		0.125	0.0293	mg/Kg		10/04/13 10:11	10/04/13 12:28	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-142564/12-A

Matrix: Solid

Analysis Batch: 142727

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 142564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.125		0.125	0.125	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Isopropylbenzene	<0.125		0.125	0.0377	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Methyl tert-butyl ether	<0.125		0.125	0.0246	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Methylene Chloride	<0.125		0.125	0.115	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
m-Xylene & p-Xylene	<0.250		0.250	0.0420	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Naphthalene	<1.25		1.25	0.0335	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
n-Butylbenzene	<0.125		0.125	0.0218	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
N-Propylbenzene	<0.125		0.125	0.0200	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
o-Xylene	<0.125		0.125	0.0327	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
sec-Butylbenzene	<0.125		0.125	0.0218	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Styrene	<0.125		0.125	0.0125	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Tert-amyl methyl ether	<0.125		0.125	0.0640	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Tert-butyl ethyl ether	<0.125		0.125	0.110	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
tert-Butylbenzene	<0.125		0.125	0.0260	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Tetrachloroethene	<0.125		0.125	0.0336	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Tetrahydrofuran	<2.50		2.50	0.230	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Toluene	<0.125		0.125	0.0189	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
trans-1,2-Dichloroethene	<0.125		0.125	0.0258	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
trans-1,3-Dichloropropene	<0.125		0.125	0.110	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Trichloroethene	<0.125		0.125	0.0550	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Trichlorofluoromethane	<0.250		0.250	0.0237	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Vinyl chloride	<0.125		0.125	0.0305	mg/Kg		10/04/13 10:11	10/04/13 12:28	1
Dibromomethane	<0.125		0.125	0.0258	mg/Kg		10/04/13 10:11	10/04/13 12:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		70 - 130	10/04/13 10:11	10/04/13 12:28	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130	10/04/13 10:11	10/04/13 12:28	1
4-Bromofluorobenzene (Surr)	100		70 - 130	10/04/13 10:11	10/04/13 12:28	1

Lab Sample ID: MB 480-142564/3-A

Matrix: Solid

Analysis Batch: 142492

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 142564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.125		0.125	0.0250	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,1,1-Trichloroethane	<0.125		0.125	0.0182	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,1,1,2,2-Tetrachloroethane	<0.125		0.125	0.0406	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,1,2-Trichloroethane	<0.125		0.125	0.0325	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,1-Dichloroethane	<0.125		0.125	0.0305	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,1-Dichloroethene	<0.125		0.125	0.0306	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,1-Dichloropropene	<0.125		0.125	0.0355	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,2,3-Trichlorobenzene	<0.125		0.125	0.0266	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,2,3-Trichloropropane	<0.125		0.125	0.0255	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,2,4-Trichlorobenzene	<0.125		0.125	0.0152	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,2,4-Trimethylbenzene	<0.125		0.125	0.0480	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,2-Dibromo-3-Chloropropane	<1.25		1.25	0.125	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,2-Dichlorobenzene	<0.125		0.125	0.0196	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,2-Dichloroethane	<0.125		0.125	0.0126	mg/Kg		10/03/13 09:44	10/03/13 13:06	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-142564/3-A

Matrix: Solid

Analysis Batch: 142492

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 142564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<0.125		0.125	0.125	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,3,5-Trimethylbenzene	<0.125		0.125	0.0161	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,3-Dichlorobenzene	<0.125		0.125	0.0129	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,3-Dichloropropane	<0.125		0.125	0.0150	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,4-Dichlorobenzene	<0.125		0.125	0.0350	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
1,4-Dioxane	<12.5		12.5	1.21	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
2,2-Dichloropropane	<0.125		0.125	0.0425	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
2-Butanone (MEK)	<1.25		1.25	0.0915	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
2-Chlorotoluene	<0.125		0.125	0.0164	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
2-Hexanone	<1.25		1.25	0.125	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
4-Chlorotoluene	<0.125		0.125	0.0295	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
4-Isopropyltoluene	<0.125		0.125	0.0201	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
4-Methyl-2-pentanone (MIBK)	<1.25		1.25	0.0820	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Acetone	<12.5		12.5	0.211	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Benzene	<0.125		0.125	0.0123	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Bromobenzene	<0.125		0.125	0.0440	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Bromoform	<0.125		0.125	0.125	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Bromomethane	<0.250		0.250	0.0225	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Carbon disulfide	<0.125		0.125	0.125	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Carbon tetrachloride	<0.125		0.125	0.0242	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Chlorobenzene	<0.125		0.125	0.0330	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Chlorobromomethane	<0.125		0.125	0.0181	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Chlorodibromomethane	<0.125		0.125	0.0320	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Chloroethane	<0.250		0.250	0.0565	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Chloroform	<0.125		0.125	0.0155	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Chloromethane	<0.250		0.250	0.0151	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
cis-1,2-Dichloroethene	<0.125		0.125	0.0320	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
cis-1,3-Dichloropropene	<0.125		0.125	0.0360	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Dichlorobromomethane	<0.125		0.125	0.0335	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Dichlorodifluoromethane	<0.250		0.250	0.0207	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Ethyl ether	<0.125		0.125	0.105	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Ethylbenzene	<0.125		0.125	0.0173	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Ethylene Dibromide	<0.125		0.125	0.0321	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Hexachlorobutadiene	<0.125		0.125	0.0293	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Isopropyl ether	<0.125		0.125	0.125	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Isopropylbenzene	<0.125		0.125	0.0377	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Methyl tert-butyl ether	<0.125		0.125	0.0246	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Methylene Chloride	<0.125		0.125	0.115	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
m-Xylene & p-Xylene	<0.250		0.250	0.0420	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Naphthalene	<1.25		1.25	0.0335	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
n-Butylbenzene	<0.125		0.125	0.0218	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
N-Propylbenzene	<0.125		0.125	0.0200	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
o-Xylene	<0.125		0.125	0.0327	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
sec-Butylbenzene	<0.125		0.125	0.0218	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Styrene	<0.125		0.125	0.0125	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Tert-amyl methyl ether	<0.125		0.125	0.0640	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Tert-butyl ethyl ether	<0.125		0.125	0.110	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
tert-Butylbenzene	<0.125		0.125	0.0260	mg/Kg		10/03/13 09:44	10/03/13 13:06	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-142564/3-A

Matrix: Solid

Analysis Batch: 142492

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 142564

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.125		0.125	0.0336	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Tetrahydrofuran	<2.50		2.50	0.230	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Toluene	<0.125		0.125	0.0189	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
trans-1,2-Dichloroethene	<0.125		0.125	0.0258	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
trans-1,3-Dichloropropene	<0.125		0.125	0.110	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Trichloroethene	<0.125		0.125	0.0550	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Trichlorofluoromethane	<0.250		0.250	0.0237	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Vinyl chloride	<0.125		0.125	0.0305	mg/Kg		10/03/13 09:44	10/03/13 13:06	1
Dibromomethane	<0.125		0.125	0.0258	mg/Kg		10/03/13 09:44	10/03/13 13:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		70 - 130	10/03/13 09:44	10/03/13 13:06	1
1,2-Dichloroethane-d4 (Surr)	99		70 - 130	10/03/13 09:44	10/03/13 13:06	1
4-Bromofluorobenzene (Surr)	98		70 - 130	10/03/13 09:44	10/03/13 13:06	1

Lab Sample ID: LCS 480-142564/10-A

Matrix: Solid

Analysis Batch: 142727

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 142564

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	1.25	1.333		mg/Kg		107	70 - 130
1,1,1-Trichloroethane	1.25	1.390		mg/Kg		111	70 - 130
1,1,2,2-Tetrachloroethane	1.25	1.269		mg/Kg		102	70 - 130
1,1,2-Trichloroethane	1.25	1.261		mg/Kg		101	70 - 130
1,1-Dichloroethane	1.25	1.341		mg/Kg		107	70 - 130
1,1-Dichloroethene	1.25	1.350		mg/Kg		108	70 - 130
1,1-Dichloropropene	1.25	1.359		mg/Kg		109	70 - 130
1,2,3-Trichlorobenzene	1.25	1.283		mg/Kg		103	70 - 130
1,2,3-Trichloropropane	1.25	1.264		mg/Kg		101	70 - 130
1,2,4-Trichlorobenzene	1.25	1.315		mg/Kg		105	70 - 130
1,2,4-Trimethylbenzene	1.25	1.319		mg/Kg		105	70 - 130
1,2-Dibromo-3-Chloropropane	1.25	1.182	J	mg/Kg		95	70 - 130
1,2-Dichlorobenzene	1.25	1.275		mg/Kg		102	70 - 130
1,2-Dichloroethane	1.25	1.310		mg/Kg		105	70 - 130
1,2-Dichloropropane	1.25	1.287		mg/Kg		103	70 - 130
1,3,5-Trimethylbenzene	1.25	1.319		mg/Kg		106	70 - 130
1,3-Dichlorobenzene	1.25	1.273		mg/Kg		102	70 - 130
1,3-Dichloropropane	1.25	1.249		mg/Kg		100	70 - 130
1,4-Dichlorobenzene	1.25	1.268		mg/Kg		101	70 - 130
1,4-Dioxane	50.0	62.24		mg/Kg		124	70 - 130
2,2-Dichloropropane	1.25	1.415		mg/Kg		113	70 - 130
2-Butanone (MEK)	6.25	9.282	*	mg/Kg		149	70 - 130
2-Chlorotoluene	1.25	1.572		mg/Kg		126	70 - 130
2-Hexanone	6.25	6.661		mg/Kg		107	70 - 130
4-Chlorotoluene	1.25	1.426		mg/Kg		114	70 - 130
4-Isopropyltoluene	1.25	1.342		mg/Kg		107	70 - 130
4-Methyl-2-pentanone (MIBK)	6.25	6.542		mg/Kg		105	70 - 130
Acetone	6.25	6.692	J	mg/Kg		107	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-142564/10-A

Matrix: Solid

Analysis Batch: 142727

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 142564

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.25	1.288		mg/Kg		103	70 - 130
Bromobenzene	1.25	1.282		mg/Kg		103	70 - 130
Bromoform	1.25	1.355		mg/Kg		108	70 - 130
Bromomethane	1.25	1.315		mg/Kg		105	70 - 130
Carbon disulfide	1.25	1.412		mg/Kg		113	70 - 130
Carbon tetrachloride	1.25	1.425		mg/Kg		114	70 - 130
Chlorobenzene	1.25	1.276		mg/Kg		102	70 - 130
Chlorobromomethane	1.25	1.335		mg/Kg		107	70 - 130
Chlorodibromomethane	1.25	1.358		mg/Kg		109	70 - 130
Chloroethane	1.25	1.314		mg/Kg		105	70 - 130
Chloroform	1.25	1.319		mg/Kg		106	70 - 130
Chloromethane	1.25	1.215		mg/Kg		97	70 - 130
cis-1,2-Dichloroethene	1.25	1.287		mg/Kg		103	70 - 130
cis-1,3-Dichloropropene	1.25	1.388		mg/Kg		111	70 - 130
Dichlorobromomethane	1.25	1.351		mg/Kg		108	70 - 130
Dichlorodifluoromethane	2.50	3.345 *		mg/Kg		134	70 - 130
Ethyl ether	1.25	1.316		mg/Kg		105	70 - 130
Ethylbenzene	1.25	1.303		mg/Kg		104	70 - 130
Ethylene Dibromide	1.25	1.279		mg/Kg		102	70 - 130
Hexachlorobutadiene	1.25	1.383		mg/Kg		111	70 - 130
Isopropyl ether	1.25	1.335		mg/Kg		107	70 - 130
Isopropylbenzene	1.25	1.346		mg/Kg		108	70 - 130
Methyl tert-butyl ether	1.25	1.399		mg/Kg		112	70 - 130
Methylene Chloride	1.25	1.264		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	2.50	2.581		mg/Kg		103	70 - 130
Naphthalene	1.25	1.274		mg/Kg		102	70 - 130
n-Butylbenzene	1.25	1.351		mg/Kg		108	70 - 130
N-Propylbenzene	1.25	1.344		mg/Kg		108	70 - 130
o-Xylene	1.25	1.318		mg/Kg		105	70 - 130
sec-Butylbenzene	1.25	1.332		mg/Kg		107	70 - 130
Styrene	1.25	1.310		mg/Kg		105	70 - 130
Tert-amyl methyl ether	1.25	1.316		mg/Kg		105	70 - 130
Tert-butyl ethyl ether	1.25	1.271		mg/Kg		102	70 - 130
tert-Butylbenzene	1.25	1.322		mg/Kg		106	70 - 130
Tetrachloroethene	1.25	1.378		mg/Kg		110	70 - 130
Tetrahydrofuran	6.25	6.370		mg/Kg		102	70 - 130
Toluene	1.25	1.295		mg/Kg		104	70 - 130
trans-1,2-Dichloroethene	1.25	1.289		mg/Kg		103	70 - 130
trans-1,3-Dichloropropene	1.25	1.366		mg/Kg		109	70 - 130
Trichloroethene	1.25	1.358		mg/Kg		109	70 - 130
Trichlorofluoromethane	1.25	1.453		mg/Kg		116	70 - 130
Vinyl chloride	1.25	1.375		mg/Kg		110	70 - 130
Dibromomethane	1.25	1.280		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	96		70 - 130
1,2-Dichloroethane-d4 (Surr)	104		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-142564/1-A

Matrix: Solid

Analysis Batch: 142492

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 142564

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	1.25	1.282		mg/Kg		103	70 - 130
1,1,1-Trichloroethane	1.25	1.283		mg/Kg		103	70 - 130
1,1,2,2-Tetrachloroethane	1.25	1.246		mg/Kg		100	70 - 130
1,1,2-Trichloroethane	1.25	1.225		mg/Kg		98	70 - 130
1,1-Dichloroethane	1.25	1.276		mg/Kg		102	70 - 130
1,1-Dichloroethene	1.25	1.251		mg/Kg		100	70 - 130
1,1-Dichloropropene	1.25	1.286		mg/Kg		103	70 - 130
1,2,3-Trichlorobenzene	1.25	1.281		mg/Kg		102	70 - 130
1,2,3-Trichloropropane	1.25	1.255		mg/Kg		100	70 - 130
1,2,4-Trichlorobenzene	1.25	1.288		mg/Kg		103	70 - 130
1,2,4-Trimethylbenzene	1.25	1.273		mg/Kg		102	70 - 130
1,2-Dibromo-3-Chloropropane	1.25	1.170	J	mg/Kg		94	70 - 130
1,2-Dichlorobenzene	1.25	1.256		mg/Kg		100	70 - 130
1,2-Dichloroethane	1.25	1.225		mg/Kg		98	70 - 130
1,2-Dichloropropane	1.25	1.247		mg/Kg		100	70 - 130
1,3,5-Trimethylbenzene	1.25	1.265		mg/Kg		101	70 - 130
1,3-Dichlorobenzene	1.25	1.251		mg/Kg		100	70 - 130
1,3-Dichloropropane	1.25	1.205		mg/Kg		96	70 - 130
1,4-Dichlorobenzene	1.25	1.232		mg/Kg		99	70 - 130
1,4-Dioxane	50.0	62.29		mg/Kg		125	70 - 130
2,2-Dichloropropane	1.25	1.311		mg/Kg		105	70 - 130
2-Butanone (MEK)	6.25	9.120	*	mg/Kg		146	70 - 130
2-Chlorotoluene	1.25	1.521		mg/Kg		122	70 - 130
2-Hexanone	6.25	6.675		mg/Kg		107	70 - 130
4-Chlorotoluene	1.25	1.370		mg/Kg		110	70 - 130
4-Isopropyltoluene	1.25	1.287		mg/Kg		103	70 - 130
4-Methyl-2-pentanone (MIBK)	6.25	6.541		mg/Kg		105	70 - 130
Acetone	6.25	6.943	J	mg/Kg		111	70 - 130
Benzene	1.25	1.229		mg/Kg		98	70 - 130
Bromobenzene	1.25	1.260		mg/Kg		101	70 - 130
Bromoform	1.25	1.335		mg/Kg		107	70 - 130
Bromomethane	1.25	1.227		mg/Kg		98	70 - 130
Carbon disulfide	1.25	1.363		mg/Kg		109	70 - 130
Carbon tetrachloride	1.25	1.308		mg/Kg		105	70 - 130
Chlorobenzene	1.25	1.241		mg/Kg		99	70 - 130
Chlorobromomethane	1.25	1.278		mg/Kg		102	70 - 130
Chlorodibromomethane	1.25	1.305		mg/Kg		104	70 - 130
Chloroethane	1.25	1.266		mg/Kg		101	70 - 130
Chloroform	1.25	1.241		mg/Kg		99	70 - 130
Chloromethane	1.25	1.186		mg/Kg		95	70 - 130
cis-1,2-Dichloroethene	1.25	1.222		mg/Kg		98	70 - 130
cis-1,3-Dichloropropene	1.25	1.320		mg/Kg		106	70 - 130
Dichlorobromomethane	1.25	1.280		mg/Kg		102	70 - 130
Dichlorodifluoromethane	2.50	3.207		mg/Kg		128	70 - 130
Ethyl ether	1.25	1.265		mg/Kg		101	70 - 130
Ethylbenzene	1.25	1.256		mg/Kg		100	70 - 130
Ethylene Dibromide	1.25	1.238		mg/Kg		99	70 - 130
Hexachlorobutadiene	1.25	1.369		mg/Kg		109	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-142564/1-A

Matrix: Solid

Analysis Batch: 142492

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 142564

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropyl ether	1.25	1.256		mg/Kg		100	70 - 130
Isopropylbenzene	1.25	1.281		mg/Kg		102	70 - 130
Methyl tert-butyl ether	1.25	1.369		mg/Kg		110	70 - 130
Methylene Chloride	1.25	1.217		mg/Kg		97	70 - 130
m-Xylene & p-Xylene	2.50	2.528		mg/Kg		101	70 - 130
Naphthalene	1.25	1.281		mg/Kg		102	70 - 130
n-Butylbenzene	1.25	1.293		mg/Kg		103	70 - 130
N-Propylbenzene	1.25	1.286		mg/Kg		103	70 - 130
o-Xylene	1.25	1.259		mg/Kg		101	70 - 130
sec-Butylbenzene	1.25	1.286		mg/Kg		103	70 - 130
Styrene	1.25	1.269		mg/Kg		101	70 - 130
Tert-amyl methyl ether	1.25	1.246		mg/Kg		100	70 - 130
Tert-butyl ethyl ether	1.25	1.190		mg/Kg		95	70 - 130
tert-Butylbenzene	1.25	1.262		mg/Kg		101	70 - 130
Tetrachloroethene	1.25	1.309		mg/Kg		105	70 - 130
Tetrahydrofuran	6.25	6.366		mg/Kg		102	70 - 130
Toluene	1.25	1.226		mg/Kg		98	70 - 130
trans-1,2-Dichloroethene	1.25	1.242		mg/Kg		99	70 - 130
trans-1,3-Dichloropropene	1.25	1.303		mg/Kg		104	70 - 130
Trichloroethene	1.25	1.273		mg/Kg		102	70 - 130
Trichlorofluoromethane	1.25	1.347		mg/Kg		108	70 - 130
Vinyl chloride	1.25	1.281		mg/Kg		102	70 - 130
Dibromomethane	1.25	1.233		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	97		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 480-142564/11-A

Matrix: Solid

Analysis Batch: 142727

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 142564

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
1,1,1,2-Tetrachloroethane	1.25	1.282		mg/Kg		103	70 - 130	4	20
1,1,1,1-Trichloroethane	1.25	1.321		mg/Kg		106	70 - 130	5	20
1,1,2,2-Tetrachloroethane	1.25	1.269		mg/Kg		101	70 - 130	0	20
1,1,2-Trichloroethane	1.25	1.224		mg/Kg		98	70 - 130	3	20
1,1-Dichloroethane	1.25	1.279		mg/Kg		102	70 - 130	5	20
1,1-Dichloroethene	1.25	1.289		mg/Kg		103	70 - 130	5	20
1,1-Dichloropropene	1.25	1.314		mg/Kg		105	70 - 130	3	20
1,2,3-Trichlorobenzene	1.25	1.301		mg/Kg		104	70 - 130	1	20
1,2,3-Trichloropropane	1.25	1.251		mg/Kg		100	70 - 130	1	20
1,2,4-Trichlorobenzene	1.25	1.294		mg/Kg		104	70 - 130	2	20
1,2,4-Trimethylbenzene	1.25	1.270		mg/Kg		102	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	1.25	1.235	J	mg/Kg		99	70 - 130	4	20
1,2-Dichlorobenzene	1.25	1.250		mg/Kg		100	70 - 130	2	20
1,2-Dichloroethane	1.25	1.268		mg/Kg		101	70 - 130	3	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-142564/11-A

Matrix: Solid

Analysis Batch: 142727

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 142564

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	RPD Limit
1,2-Dichloropropane	1.25	1.253		mg/Kg		100	70 - 130		3	20
1,3,5-Trimethylbenzene	1.25	1.278		mg/Kg		102	70 - 130		3	20
1,3-Dichlorobenzene	1.25	1.246		mg/Kg		100	70 - 130		2	20
1,3-Dichloropropane	1.25	1.210		mg/Kg		97	70 - 130		3	20
1,4-Dichlorobenzene	1.25	1.239		mg/Kg		99	70 - 130		2	20
1,4-Dioxane	50.0	61.65		mg/Kg		123	70 - 130		1	20
2,2-Dichloropropane	1.25	1.345		mg/Kg		108	70 - 130		5	20
2-Butanone (MEK)	6.25	9.228	*	mg/Kg		148	70 - 130		1	20
2-Chlorotoluene	1.25	1.542		mg/Kg		123	70 - 130		2	20
2-Hexanone	6.25	6.671		mg/Kg		107	70 - 130		0	20
4-Chlorotoluene	1.25	1.395		mg/Kg		112	70 - 130		2	20
4-Isopropyltoluene	1.25	1.307		mg/Kg		105	70 - 130		3	20
4-Methyl-2-pentanone (MIBK)	6.25	6.531		mg/Kg		104	70 - 130		0	20
Acetone	6.25	6.715	J	mg/Kg		107	70 - 130		0	20
Benzene	1.25	1.238		mg/Kg		99	70 - 130		4	20
Bromobenzene	1.25	1.262		mg/Kg		101	70 - 130		2	20
Bromoform	1.25	1.371		mg/Kg		110	70 - 130		1	20
Bromomethane	1.25	1.232		mg/Kg		99	70 - 130		7	20
Carbon disulfide	1.25	1.351		mg/Kg		108	70 - 130		4	20
Carbon tetrachloride	1.25	1.351		mg/Kg		108	70 - 130		5	20
Chlorobenzene	1.25	1.225		mg/Kg		98	70 - 130		4	20
Chlorobromomethane	1.25	1.279		mg/Kg		102	70 - 130		4	20
Chlorodibromomethane	1.25	1.316		mg/Kg		105	70 - 130		3	20
Chloroethane	1.25	1.258		mg/Kg		101	70 - 130		4	20
Chloroform	1.25	1.252		mg/Kg		100	70 - 130		5	20
Chloromethane	1.25	1.137		mg/Kg		91	70 - 130		7	20
cis-1,2-Dichloroethene	1.25	1.235		mg/Kg		99	70 - 130		4	20
cis-1,3-Dichloropropene	1.25	1.325		mg/Kg		106	70 - 130		5	20
Dichlorobromomethane	1.25	1.290		mg/Kg		103	70 - 130		5	20
Dichlorodifluoromethane	2.50	3.113		mg/Kg		125	70 - 130		7	20
Ethyl ether	1.25	1.278		mg/Kg		102	70 - 130		3	20
Ethylbenzene	1.25	1.253		mg/Kg		100	70 - 130		4	20
Ethylene Dibromide	1.25	1.257		mg/Kg		101	70 - 130		2	20
Hexachlorobutadiene	1.25	1.382		mg/Kg		111	70 - 130		0	20
Isopropyl ether	1.25	1.277		mg/Kg		102	70 - 130		4	20
Isopropylbenzene	1.25	1.305		mg/Kg		104	70 - 130		3	20
Methyl tert-butyl ether	1.25	1.366		mg/Kg		109	70 - 130		2	20
Methylene Chloride	1.25	1.234		mg/Kg		99	70 - 130		2	20
m-Xylene & p-Xylene	2.50	2.511		mg/Kg		100	70 - 130		3	20
Naphthalene	1.25	1.318		mg/Kg		105	70 - 130		3	20
n-Butylbenzene	1.25	1.317		mg/Kg		105	70 - 130		3	20
N-Propylbenzene	1.25	1.307		mg/Kg		105	70 - 130		3	20
o-Xylene	1.25	1.268		mg/Kg		101	70 - 130		4	20
sec-Butylbenzene	1.25	1.298		mg/Kg		104	70 - 130		3	20
Styrene	1.25	1.269		mg/Kg		102	70 - 130		3	20
Tert-amyl methyl ether	1.25	1.278		mg/Kg		102	70 - 130		3	20
Tert-butyl ethyl ether	1.25	1.239		mg/Kg		99	70 - 130		3	20
tert-Butylbenzene	1.25	1.304		mg/Kg		104	70 - 130		1	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-142564/11-A

Matrix: Solid

Analysis Batch: 142727

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 142564

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Tetrachloroethene	1.25	1.313		mg/Kg		105	70 - 130	5	20
Tetrahydrofuran	6.25	6.128		mg/Kg		98	70 - 130	4	20
Toluene	1.25	1.239		mg/Kg		99	70 - 130	4	20
trans-1,2-Dichloroethene	1.25	1.251		mg/Kg		100	70 - 130	3	20
trans-1,3-Dichloropropene	1.25	1.329		mg/Kg		106	70 - 130	3	20
Trichloroethene	1.25	1.300		mg/Kg		104	70 - 130	4	20
Trichlorofluoromethane	1.25	1.386		mg/Kg		111	70 - 130	5	20
Vinyl chloride	1.25	1.274		mg/Kg		102	70 - 130	8	20
Dibromomethane	1.25	1.250		mg/Kg		100	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	97		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 480-142564/2-A

Matrix: Solid

Analysis Batch: 142492

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 142564

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	1.25	1.330		mg/Kg		106	70 - 130	4	20
1,1,1-Trichloroethane	1.25	1.366		mg/Kg		109	70 - 130	6	20
1,1,2,2-Tetrachloroethane	1.25	1.270		mg/Kg		102	70 - 130	2	20
1,1,2-Trichloroethane	1.25	1.272		mg/Kg		102	70 - 130	4	20
1,1-Dichloroethane	1.25	1.330		mg/Kg		106	70 - 130	4	20
1,1-Dichloroethene	1.25	1.348		mg/Kg		108	70 - 130	7	20
1,1-Dichloropropene	1.25	1.357		mg/Kg		109	70 - 130	5	20
1,2,3-Trichlorobenzene	1.25	1.313		mg/Kg		105	70 - 130	2	20
1,2,3-Trichloropropane	1.25	1.273		mg/Kg		102	70 - 130	1	20
1,2,4-Trichlorobenzene	1.25	1.332		mg/Kg		107	70 - 130	3	20
1,2,4-Trimethylbenzene	1.25	1.307		mg/Kg		105	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	1.25	1.212	J	mg/Kg		97	70 - 130	4	20
1,2-Dichlorobenzene	1.25	1.273		mg/Kg		102	70 - 130	1	20
1,2-Dichloroethane	1.25	1.259		mg/Kg		101	70 - 130	3	20
1,2-Dichloropropane	1.25	1.305		mg/Kg		104	70 - 130	5	20
1,3,5-Trimethylbenzene	1.25	1.315		mg/Kg		105	70 - 130	4	20
1,3-Dichlorobenzene	1.25	1.276		mg/Kg		102	70 - 130	2	20
1,3-Dichloropropane	1.25	1.279		mg/Kg		102	70 - 130	6	20
1,4-Dichlorobenzene	1.25	1.280		mg/Kg		102	70 - 130	4	20
1,4-Dioxane	50.0	66.40	*	mg/Kg		133	70 - 130	6	20
2,2-Dichloropropane	1.25	1.377		mg/Kg		110	70 - 130	5	20
2-Butanone (MEK)	6.25	9.437	*	mg/Kg		151	70 - 130	3	20
2-Chlorotoluene	1.25	1.288		mg/Kg		103	70 - 130	17	20
2-Hexanone	6.25	6.964		mg/Kg		111	70 - 130	4	20
4-Chlorotoluene	1.25	1.391		mg/Kg		111	70 - 130	2	20
4-Isopropyltoluene	1.25	1.334		mg/Kg		107	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	6.25	6.835		mg/Kg		109	70 - 130	4	20
Acetone	6.25	7.118	J	mg/Kg		114	70 - 130	2	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-142564/2-A

Matrix: Solid

Analysis Batch: 142492

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 142564

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	RPD Limit
Benzene	1.25	1.289		mg/Kg		103	70 - 130		5	20
Bromobenzene	1.25	1.283		mg/Kg		103	70 - 130		2	20
Bromoform	1.25	1.368		mg/Kg		109	70 - 130		2	20
Bromomethane	1.25	1.288		mg/Kg		103	70 - 130		5	20
Carbon disulfide	1.25	1.492		mg/Kg		119	70 - 130		9	20
Carbon tetrachloride	1.25	1.397		mg/Kg		112	70 - 130		7	20
Chlorobenzene	1.25	1.296		mg/Kg		104	70 - 130		4	20
Chlorobromomethane	1.25	1.313		mg/Kg		105	70 - 130		3	20
Chlorodibromomethane	1.25	1.362		mg/Kg		109	70 - 130		4	20
Chloroethane	1.25	1.331		mg/Kg		106	70 - 130		5	20
Chloroform	1.25	1.291		mg/Kg		103	70 - 130		4	20
Chloromethane	1.25	1.257		mg/Kg		101	70 - 130		6	20
cis-1,2-Dichloroethene	1.25	1.288		mg/Kg		103	70 - 130		5	20
cis-1,3-Dichloropropene	1.25	1.381		mg/Kg		110	70 - 130		4	20
Dichlorobromomethane	1.25	1.329		mg/Kg		106	70 - 130		4	20
Dichlorodifluoromethane	2.50	3.420 *		mg/Kg		137	70 - 130		6	20
Ethyl ether	1.25	1.301		mg/Kg		104	70 - 130		3	20
Ethylbenzene	1.25	1.317		mg/Kg		105	70 - 130		5	20
Ethylene Dibromide	1.25	1.335		mg/Kg		107	70 - 130		8	20
Hexachlorobutadiene	1.25	1.440		mg/Kg		115	70 - 130		5	20
Isopropyl ether	1.25	1.287		mg/Kg		103	70 - 130		2	20
Isopropylbenzene	1.25	1.322		mg/Kg		106	70 - 130		3	20
Methyl tert-butyl ether	1.25	1.400		mg/Kg		112	70 - 130		2	20
Methylene Chloride	1.25	1.258		mg/Kg		101	70 - 130		3	20
m-Xylene & p-Xylene	2.50	2.613		mg/Kg		105	70 - 130		3	20
Naphthalene	1.25	1.348		mg/Kg		108	70 - 130		5	20
n-Butylbenzene	1.25	1.349		mg/Kg		108	70 - 130		4	20
N-Propylbenzene	1.25	1.330		mg/Kg		106	70 - 130		3	20
o-Xylene	1.25	1.327		mg/Kg		106	70 - 130		5	20
sec-Butylbenzene	1.25	1.339		mg/Kg		107	70 - 130		4	20
Styrene	1.25	1.326		mg/Kg		106	70 - 130		4	20
Tert-amyl methyl ether	1.25	1.282		mg/Kg		103	70 - 130		3	20
Tert-butyl ethyl ether	1.25	1.247		mg/Kg		100	70 - 130		5	20
tert-Butylbenzene	1.25	1.344		mg/Kg		107	70 - 130		6	20
Tetrachloroethene	1.25	1.409		mg/Kg		113	70 - 130		7	20
Tetrahydrofuran	6.25	6.585		mg/Kg		105	70 - 130		3	20
Toluene	1.25	1.310		mg/Kg		105	70 - 130		7	20
trans-1,2-Dichloroethene	1.25	1.311		mg/Kg		105	70 - 130		5	20
trans-1,3-Dichloropropene	1.25	1.377		mg/Kg		110	70 - 130		6	20
Trichloroethene	1.25	1.346		mg/Kg		108	70 - 130		6	20
Trichlorofluoromethane	1.25	1.426		mg/Kg		114	70 - 130		6	20
Vinyl chloride	1.25	1.387		mg/Kg		111	70 - 130		8	20
Dibromomethane	1.25	1.283		mg/Kg		103	70 - 130		4	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	98		70 - 130
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	104		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-143062/9

Matrix: Solid

Analysis Batch: 143062

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00250		0.00250	0.000500	mg/Kg			10/07/13 00:28	1
1,1,1-Trichloroethane	<0.00250		0.00250	0.000363	mg/Kg			10/07/13 00:28	1
1,1,2,2-Tetrachloroethane	<0.00250		0.00250	0.000811	mg/Kg			10/07/13 00:28	1
1,1,2-Trichloroethane	<0.00250		0.00250	0.000650	mg/Kg			10/07/13 00:28	1
1,1-Dichloroethane	<0.00250		0.00250	0.000610	mg/Kg			10/07/13 00:28	1
1,1-Dichloroethene	<0.00250		0.00250	0.000612	mg/Kg			10/07/13 00:28	1
1,1-Dichloropropene	<0.00250		0.00250	0.000710	mg/Kg			10/07/13 00:28	1
1,2,3-Trichlorobenzene	<0.00250		0.00250	0.000531	mg/Kg			10/07/13 00:28	1
1,2,3-Trichloropropane	<0.00250		0.00250	0.000509	mg/Kg			10/07/13 00:28	1
1,2,4-Trichlorobenzene	<0.00250		0.00250	0.000304	mg/Kg			10/07/13 00:28	1
1,2,4-Trimethylbenzene	<0.00250		0.00250	0.000960	mg/Kg			10/07/13 00:28	1
1,2-Dibromo-3-Chloropropane	<0.0250		0.0250	0.00250	mg/Kg			10/07/13 00:28	1
1,2-Dichlorobenzene	<0.00250		0.00250	0.000391	mg/Kg			10/07/13 00:28	1
1,2-Dichloroethane	<0.00250		0.00250	0.000251	mg/Kg			10/07/13 00:28	1
1,2-Dichloropropane	<0.00250		0.00250	0.00250	mg/Kg			10/07/13 00:28	1
1,3,5-Trimethylbenzene	<0.00250		0.00250	0.000322	mg/Kg			10/07/13 00:28	1
1,3-Dichlorobenzene	<0.00250		0.00250	0.000257	mg/Kg			10/07/13 00:28	1
1,3-Dichloropropane	<0.00250		0.00250	0.000300	mg/Kg			10/07/13 00:28	1
1,4-Dichlorobenzene	<0.00250		0.00250	0.000700	mg/Kg			10/07/13 00:28	1
1,4-Dioxane	<0.250		0.250	0.0241	mg/Kg			10/07/13 00:28	1
2,2-Dichloropropane	<0.00250		0.00250	0.000850	mg/Kg			10/07/13 00:28	1
2-Butanone (MEK)	<0.0250		0.0250	0.00183	mg/Kg			10/07/13 00:28	1
2-Chlorotoluene	<0.00250		0.00250	0.000328	mg/Kg			10/07/13 00:28	1
2-Hexanone	<0.0250		0.0250	0.00250	mg/Kg			10/07/13 00:28	1
4-Chlorotoluene	<0.00250		0.00250	0.000590	mg/Kg			10/07/13 00:28	1
4-Isopropyltoluene	<0.00250		0.00250	0.000401	mg/Kg			10/07/13 00:28	1
4-Methyl-2-pentanone (MIBK)	<0.0250		0.0250	0.00164	mg/Kg			10/07/13 00:28	1
Acetone	<0.250		0.250	0.00421	mg/Kg			10/07/13 00:28	1
Benzene	<0.00250		0.00250	0.000245	mg/Kg			10/07/13 00:28	1
Bromobenzene	<0.00250		0.00250	0.000880	mg/Kg			10/07/13 00:28	1
Bromoform	<0.00250		0.00250	0.00250	mg/Kg			10/07/13 00:28	1
Bromomethane	<0.00500		0.00500	0.000450	mg/Kg			10/07/13 00:28	1
Carbon disulfide	<0.00250		0.00250	0.00250	mg/Kg			10/07/13 00:28	1
Carbon tetrachloride	<0.00250		0.00250	0.000484	mg/Kg			10/07/13 00:28	1
Chlorobenzene	<0.00250		0.00250	0.000660	mg/Kg			10/07/13 00:28	1
Chlorobromomethane	<0.00250		0.00250	0.000361	mg/Kg			10/07/13 00:28	1
Chlorodibromomethane	<0.00250		0.00250	0.000640	mg/Kg			10/07/13 00:28	1
Chloroethane	<0.00500		0.00500	0.00113	mg/Kg			10/07/13 00:28	1
Chloroform	<0.00250		0.00250	0.000309	mg/Kg			10/07/13 00:28	1
Chloromethane	<0.00500		0.00500	0.000302	mg/Kg			10/07/13 00:28	1
cis-1,2-Dichloroethene	<0.00250		0.00250	0.000640	mg/Kg			10/07/13 00:28	1
cis-1,3-Dichloropropene	<0.00250		0.00250	0.000720	mg/Kg			10/07/13 00:28	1
Dichlorobromomethane	<0.00250		0.00250	0.000670	mg/Kg			10/07/13 00:28	1
Dichlorodifluoromethane	<0.00500		0.00500	0.000413	mg/Kg			10/07/13 00:28	1
Ethyl ether	<0.00250		0.00250	0.00210	mg/Kg			10/07/13 00:28	1
Ethylbenzene	<0.00250		0.00250	0.000345	mg/Kg			10/07/13 00:28	1
Ethylene Dibromide	<0.00250		0.00250	0.000642	mg/Kg			10/07/13 00:28	1
Hexachlorobutadiene	<0.00250		0.00250	0.000586	mg/Kg			10/07/13 00:28	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-143062/9

Matrix: Solid

Analysis Batch: 143062

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.00250		0.00250	0.00250	mg/Kg			10/07/13 00:28	1
Isopropylbenzene	<0.00250		0.00250	0.000754	mg/Kg			10/07/13 00:28	1
Methyl tert-butyl ether	<0.00250		0.00250	0.000491	mg/Kg			10/07/13 00:28	1
Methylene Chloride	<0.00250		0.00250	0.00230	mg/Kg			10/07/13 00:28	1
m-Xylene & p-Xylene	<0.00500		0.00500	0.000840	mg/Kg			10/07/13 00:28	1
Naphthalene	<0.0250		0.0250	0.000670	mg/Kg			10/07/13 00:28	1
n-Butylbenzene	<0.00250		0.00250	0.000435	mg/Kg			10/07/13 00:28	1
N-Propylbenzene	<0.00250		0.00250	0.000400	mg/Kg			10/07/13 00:28	1
o-Xylene	<0.00250		0.00250	0.000653	mg/Kg			10/07/13 00:28	1
sec-Butylbenzene	<0.00250		0.00250	0.000435	mg/Kg			10/07/13 00:28	1
Styrene	<0.00250		0.00250	0.000250	mg/Kg			10/07/13 00:28	1
Tert-amyl methyl ether	<0.00250		0.00250	0.00128	mg/Kg			10/07/13 00:28	1
Tert-butyl ethyl ether	<0.00250		0.00250	0.00220	mg/Kg			10/07/13 00:28	1
tert-Butylbenzene	<0.00250		0.00250	0.000520	mg/Kg			10/07/13 00:28	1
Tetrachloroethene	<0.00250		0.00250	0.000671	mg/Kg			10/07/13 00:28	1
Tetrahydrofuran	<0.0500		0.0500	0.00460	mg/Kg			10/07/13 00:28	1
Toluene	<0.00250		0.00250	0.000378	mg/Kg			10/07/13 00:28	1
trans-1,2-Dichloroethene	<0.00250		0.00250	0.000516	mg/Kg			10/07/13 00:28	1
trans-1,3-Dichloropropene	<0.00250		0.00250	0.00220	mg/Kg			10/07/13 00:28	1
Trichloroethene	<0.00250		0.00250	0.00110	mg/Kg			10/07/13 00:28	1
Trichlorofluoromethane	<0.00500		0.00500	0.000473	mg/Kg			10/07/13 00:28	1
Vinyl chloride	<0.00250		0.00250	0.000610	mg/Kg			10/07/13 00:28	1
Dibromomethane	<0.00250		0.00250	0.000515	mg/Kg			10/07/13 00:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130		10/07/13 00:28	1
1,2-Dichloroethane-d4 (Surr)	106		70 - 130		10/07/13 00:28	1
4-Bromofluorobenzene (Surr)	85		70 - 130		10/07/13 00:28	1

Lab Sample ID: LCS 480-143062/7

Matrix: Solid

Analysis Batch: 143062

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0500	0.05241		mg/Kg		105	70 - 130
1,1,1-Trichloroethane	0.0500	0.05230		mg/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.04741		mg/Kg		95	70 - 130
1,1,2-Trichloroethane	0.0500	0.04788		mg/Kg		96	70 - 130
1,1-Dichloroethane	0.0500	0.05007		mg/Kg		100	70 - 130
1,1-Dichloroethene	0.0500	0.04969		mg/Kg		99	70 - 130
1,1-Dichloropropene	0.0500	0.04943		mg/Kg		99	70 - 130
1,2,3-Trichlorobenzene	0.0500	0.05215		mg/Kg		104	70 - 130
1,2,3-Trichloropropane	0.0500	0.04997		mg/Kg		100	70 - 130
1,2,4-Trichlorobenzene	0.0500	0.05425		mg/Kg		108	70 - 130
1,2,4-Trimethylbenzene	0.0500	0.05011		mg/Kg		100	70 - 130
1,2-Dibromo-3-Chloropropane	0.0500	0.04701		mg/Kg		94	70 - 130
1,2-Dichlorobenzene	0.0500	0.04919		mg/Kg		98	70 - 130
1,2-Dichloroethane	0.0500	0.05060		mg/Kg		101	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-143062/7

Matrix: Solid

Analysis Batch: 143062

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.0500	0.04679		mg/Kg		94	70 - 130
1,3,5-Trimethylbenzene	0.0500	0.04981		mg/Kg		100	70 - 130
1,3-Dichlorobenzene	0.0500	0.04871		mg/Kg		97	70 - 130
1,3-Dichloropropane	0.0500	0.04875		mg/Kg		97	70 - 130
1,4-Dichlorobenzene	0.0500	0.04694		mg/Kg		94	70 - 130
1,4-Dioxane	2.00	1.802		mg/Kg		90	70 - 130
2,2-Dichloropropane	0.0500	0.05237		mg/Kg		105	70 - 130
2-Butanone (MEK)	0.250	0.3011		mg/Kg		120	70 - 130
2-Chlorotoluene	0.0500	0.04926		mg/Kg		99	70 - 130
2-Hexanone	0.250	0.2337		mg/Kg		93	70 - 130
4-Chlorotoluene	0.0500	0.05115		mg/Kg		102	70 - 130
4-Isopropyltoluene	0.0500	0.05097		mg/Kg		102	70 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2325		mg/Kg		93	70 - 130
Acetone	0.250	0.2601		mg/Kg		104	70 - 130
Benzene	0.0500	0.04621		mg/Kg		92	70 - 130
Bromobenzene	0.0500	0.04939		mg/Kg		99	70 - 130
Bromoform	0.0500	0.04594		mg/Kg		92	70 - 130
Bromomethane	0.0500	0.04938		mg/Kg		99	70 - 130
Carbon disulfide	0.0500	0.05672		mg/Kg		113	70 - 130
Carbon tetrachloride	0.0500	0.05340		mg/Kg		107	70 - 130
Chlorobenzene	0.0500	0.04538		mg/Kg		91	70 - 130
Chlorobromomethane	0.0500	0.04897		mg/Kg		98	70 - 130
Chlorodibromomethane	0.0500	0.05329		mg/Kg		107	70 - 130
Chloroethane	0.0500	0.04644		mg/Kg		93	70 - 130
Chloroform	0.0500	0.04921		mg/Kg		98	70 - 130
Chloromethane	0.0500	0.04686		mg/Kg		94	70 - 130
cis-1,2-Dichloroethene	0.0500	0.04768		mg/Kg		95	70 - 130
cis-1,3-Dichloropropene	0.0500	0.05114		mg/Kg		102	70 - 130
Dichlorobromomethane	0.0500	0.05125		mg/Kg		103	70 - 130
Dichlorodifluoromethane	0.100	0.1217		mg/Kg		122	70 - 130
Ethyl ether	0.0500	0.04311		mg/Kg		86	70 - 130
Ethylbenzene	0.0500	0.04916		mg/Kg		98	70 - 130
Ethylene Dibromide	0.0500	0.04868		mg/Kg		97	70 - 130
Hexachlorobutadiene	0.0500	0.05241		mg/Kg		105	70 - 130
Isopropyl ether	0.0500	0.04468		mg/Kg		89	70 - 130
Isopropylbenzene	0.0500	0.04991		mg/Kg		100	70 - 130
Methyl tert-butyl ether	0.0500	0.04819		mg/Kg		96	70 - 130
Methylene Chloride	0.0500	0.04654		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.100	0.09795		mg/Kg		98	70 - 130
Naphthalene	0.0500	0.04989		mg/Kg		100	70 - 130
n-Butylbenzene	0.0500	0.05049		mg/Kg		101	70 - 130
N-Propylbenzene	0.0500	0.04862		mg/Kg		97	70 - 130
o-Xylene	0.0500	0.04966		mg/Kg		99	70 - 130
sec-Butylbenzene	0.0500	0.04934		mg/Kg		99	70 - 130
Styrene	0.0500	0.05001		mg/Kg		100	70 - 130
Tert-amyl methyl ether	0.0500	0.04584		mg/Kg		92	70 - 130
Tert-butyl ethyl ether	0.0500	0.04473		mg/Kg		89	70 - 130
tert-Butylbenzene	0.0500	0.05052		mg/Kg		101	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-143062/7

Matrix: Solid

Analysis Batch: 143062

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	0.0500	0.05636		mg/Kg		113	70 - 130
Tetrahydrofuran	0.250	0.2129		mg/Kg		85	70 - 130
Toluene	0.0500	0.04807		mg/Kg		96	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04836		mg/Kg		97	70 - 130
trans-1,3-Dichloropropene	0.0500	0.05225		mg/Kg		104	70 - 130
Trichloroethene	0.0500	0.04825		mg/Kg		96	70 - 130
Trichlorofluoromethane	0.0500	0.05529		mg/Kg		111	70 - 130
Vinyl chloride	0.0500	0.04852		mg/Kg		97	70 - 130
Dibromomethane	0.0500	0.04948		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		70 - 130
1,2-Dichloroethane-d4 (Surr)	109		70 - 130
4-Bromofluorobenzene (Surr)	89		70 - 130

Lab Sample ID: LCSD 480-143062/8

Matrix: Solid

Analysis Batch: 143062

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0500	0.05086		mg/Kg		102	70 - 130	3	20
1,1,1-Trichloroethane	0.0500	0.04916		mg/Kg		98	70 - 130	6	20
1,1,2,2-Tetrachloroethane	0.0500	0.04943		mg/Kg		99	70 - 130	4	20
1,1,2-Trichloroethane	0.0500	0.04829		mg/Kg		97	70 - 130	1	20
1,1-Dichloroethane	0.0500	0.04798		mg/Kg		96	70 - 130	4	20
1,1-Dichloroethene	0.0500	0.04733		mg/Kg		95	70 - 130	5	20
1,1-Dichloropropene	0.0500	0.04716		mg/Kg		94	70 - 130	5	20
1,2,3-Trichlorobenzene	0.0500	0.05358		mg/Kg		107	70 - 130	3	20
1,2,3-Trichloropropane	0.0500	0.05134		mg/Kg		103	70 - 130	3	20
1,2,4-Trichlorobenzene	0.0500	0.05270		mg/Kg		105	70 - 130	3	20
1,2,4-Trimethylbenzene	0.0500	0.04921		mg/Kg		98	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	0.0500	0.05052		mg/Kg		101	70 - 130	7	20
1,2-Dichlorobenzene	0.0500	0.04830		mg/Kg		97	70 - 130	2	20
1,2-Dichloroethane	0.0500	0.05008		mg/Kg		100	70 - 130	1	20
1,2-Dichloropropane	0.0500	0.04604		mg/Kg		92	70 - 130	2	20
1,3,5-Trimethylbenzene	0.0500	0.04815		mg/Kg		96	70 - 130	3	20
1,3-Dichlorobenzene	0.0500	0.04766		mg/Kg		95	70 - 130	2	20
1,3-Dichloropropane	0.0500	0.04880		mg/Kg		98	70 - 130	0	20
1,4-Dichlorobenzene	0.0500	0.04603		mg/Kg		92	70 - 130	2	20
1,4-Dioxane	2.00	1.833		mg/Kg		92	70 - 130	2	20
2,2-Dichloropropane	0.0500	0.04979		mg/Kg		100	70 - 130	5	20
2-Butanone (MEK)	0.250	0.3218		mg/Kg		129	70 - 130	7	20
2-Chlorotoluene	0.0500	0.04741		mg/Kg		95	70 - 130	4	20
2-Hexanone	0.250	0.2513		mg/Kg		101	70 - 130	7	20
4-Chlorotoluene	0.0500	0.04929		mg/Kg		99	70 - 130	4	20
4-Isopropyltoluene	0.0500	0.04883		mg/Kg		98	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	0.250	0.2471		mg/Kg		99	70 - 130	6	20
Acetone	0.250	0.2750		mg/Kg		110	70 - 130	6	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-143062/8

Matrix: Solid

Analysis Batch: 143062

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04489		mg/Kg		90	70 - 130	3	20
Bromobenzene	0.0500	0.04923		mg/Kg		98	70 - 130	0	20
Bromoform	0.0500	0.04715		mg/Kg		94	70 - 130	3	20
Bromomethane	0.0500	0.04984		mg/Kg		100	70 - 130	1	20
Carbon disulfide	0.0500	0.05324		mg/Kg		106	70 - 130	6	20
Carbon tetrachloride	0.0500	0.05020		mg/Kg		100	70 - 130	6	20
Chlorobenzene	0.0500	0.04401		mg/Kg		88	70 - 130	3	20
Chlorobromomethane	0.0500	0.04870		mg/Kg		97	70 - 130	1	20
Chlorodibromomethane	0.0500	0.05336		mg/Kg		107	70 - 130	0	20
Chloroethane	0.0500	0.04931		mg/Kg		99	70 - 130	6	20
Chloroform	0.0500	0.04781		mg/Kg		96	70 - 130	3	20
Chloromethane	0.0500	0.04580		mg/Kg		92	70 - 130	2	20
cis-1,2-Dichloroethene	0.0500	0.04635		mg/Kg		93	70 - 130	3	20
cis-1,3-Dichloropropene	0.0500	0.05012		mg/Kg		100	70 - 130	2	20
Dichlorobromomethane	0.0500	0.04980		mg/Kg		100	70 - 130	3	20
Dichlorodifluoromethane	0.100	0.1150		mg/Kg		115	70 - 130	6	20
Ethyl ether	0.0500	0.04384		mg/Kg		88	70 - 130	2	20
Ethylbenzene	0.0500	0.04700		mg/Kg		94	70 - 130	4	20
Ethylene Dibromide	0.0500	0.05103		mg/Kg		102	70 - 130	5	20
Hexachlorobutadiene	0.0500	0.04924		mg/Kg		98	70 - 130	6	20
Isopropyl ether	0.0500	0.04406		mg/Kg		88	70 - 130	1	20
Isopropylbenzene	0.0500	0.04806		mg/Kg		96	70 - 130	4	20
Methyl tert-butyl ether	0.0500	0.04949		mg/Kg		99	70 - 130	3	20
Methylene Chloride	0.0500	0.04509		mg/Kg		90	70 - 130	3	20
m-Xylene & p-Xylene	0.100	0.09347		mg/Kg		93	70 - 130	5	20
Naphthalene	0.0500	0.05326		mg/Kg		107	70 - 130	7	20
n-Butylbenzene	0.0500	0.04849		mg/Kg		97	70 - 130	4	20
N-Propylbenzene	0.0500	0.04728		mg/Kg		95	70 - 130	3	20
o-Xylene	0.0500	0.04786		mg/Kg		96	70 - 130	4	20
sec-Butylbenzene	0.0500	0.04748		mg/Kg		95	70 - 130	4	20
Styrene	0.0500	0.04875		mg/Kg		97	70 - 130	3	20
Tert-amyl methyl ether	0.0500	0.04659		mg/Kg		93	70 - 130	2	20
Tert-butyl ethyl ether	0.0500	0.04498		mg/Kg		90	70 - 130	1	20
tert-Butylbenzene	0.0500	0.04752		mg/Kg		95	70 - 130	6	20
Tetrachloroethene	0.0500	0.05425		mg/Kg		108	70 - 130	4	20
Tetrahydrofuran	0.250	0.2326		mg/Kg		93	70 - 130	9	20
Toluene	0.0500	0.04657		mg/Kg		93	70 - 130	3	20
trans-1,2-Dichloroethene	0.0500	0.04555		mg/Kg		91	70 - 130	6	20
trans-1,3-Dichloropropene	0.0500	0.05172		mg/Kg		103	70 - 130	1	20
Trichloroethene	0.0500	0.04600		mg/Kg		92	70 - 130	5	20
Trichlorofluoromethane	0.0500	0.05411		mg/Kg		108	70 - 130	2	20
Vinyl chloride	0.0500	0.04709		mg/Kg		94	70 - 130	3	20
Dibromomethane	0.0500	0.04923		mg/Kg		98	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	99		70 - 130
1,2-Dichloroethane-d4 (Surr)	108		70 - 130
4-Bromofluorobenzene (Surr)	88		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 480-142077/1-A

Matrix: Solid

Analysis Batch: 142133

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 142077

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.0500		0.0500	0.0100	mg/Kg		10/01/13 12:20	10/01/13 17:11	1
C5-C8 Aliphatics (unadjusted)	0.01748	J	0.250	0.0100	mg/Kg		10/01/13 12:20	10/01/13 17:11	1
C9-C10 Aromatics	<0.250		0.250	0.0100	mg/Kg		10/01/13 12:20	10/01/13 17:11	1
C9-C12 Aliphatics (unadjusted)	<0.250		0.250	0.0100	mg/Kg		10/01/13 12:20	10/01/13 17:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	87		70 - 130	10/01/13 12:20	10/01/13 17:11	1
2,5-Dibromotoluene (pid)	89		70 - 130	10/01/13 12:20	10/01/13 17:11	1

Lab Sample ID: LCS 480-142077/2-A

Matrix: Solid

Analysis Batch: 142133

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 142077

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.250	0.2420		mg/Kg		97	70 - 130
C5-C8 Aliphatics (unadjusted)	0.750	0.6891		mg/Kg		92	70 - 130
C9-C10 Aromatics	0.250	0.2333	J	mg/Kg		93	70 - 130
C9-C12 Aliphatics (unadjusted)	0.750	0.7179		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,5-Dibromotoluene (fid)	87		70 - 130
2,5-Dibromotoluene (pid)	88		70 - 130

Lab Sample ID: LCSD 480-142077/3-A

Matrix: Solid

Analysis Batch: 142133

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 142077

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.250	0.2439		mg/Kg		98	70 - 130	1	25
C5-C8 Aliphatics (unadjusted)	0.750	0.6845		mg/Kg		91	70 - 130	1	25
C9-C10 Aromatics	0.250	0.2356	J	mg/Kg		94	70 - 130	1	25
C9-C12 Aliphatics (unadjusted)	0.750	0.7232		mg/Kg		96	70 - 130	1	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,5-Dibromotoluene (fid)	89		70 - 130
2,5-Dibromotoluene (pid)	90		70 - 130

Lab Sample ID: MB 480-142333/1-A

Matrix: Solid

Analysis Batch: 142270

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 142333

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0500		0.0500	0.0100	mg/Kg		10/02/13 09:15	10/02/13 11:02	1
Ethylbenzene	<0.0500		0.0500	0.0100	mg/Kg		10/02/13 09:15	10/02/13 11:02	1
Methyl tert-butyl ether	<0.0500		0.0500	0.0100	mg/Kg		10/02/13 09:15	10/02/13 11:02	1
m-Xylene & p-Xylene	<0.100		0.100	0.0100	mg/Kg		10/02/13 09:15	10/02/13 11:02	1
Naphthalene	0.01841	J	0.0500	0.0100	mg/Kg		10/02/13 09:15	10/02/13 11:02	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: MB 480-142333/1-A

Matrix: Solid

Analysis Batch: 142270

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 142333

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.0500		0.0500	0.0100	mg/Kg		10/02/13 09:15	10/02/13 11:02	1
Toluene	<0.0500		0.0500	0.0100	mg/Kg		10/02/13 09:15	10/02/13 11:02	1
C5-C8 Aliphatics (unadjusted)	0.01053	J	0.250	0.0100	mg/Kg		10/02/13 09:15	10/02/13 11:02	1
C9-C10 Aromatics	<0.250		0.250	0.0100	mg/Kg		10/02/13 09:15	10/02/13 11:02	1
C9-C12 Aliphatics (unadjusted)	0.01307	J	0.250	0.0100	mg/Kg		10/02/13 09:15	10/02/13 11:02	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	84		70 - 130	10/02/13 09:15	10/02/13 11:02	1
2,5-Dibromotoluene (pid)	87		70 - 130	10/02/13 09:15	10/02/13 11:02	1

Lab Sample ID: LCS 480-142333/2-A

Matrix: Solid

Analysis Batch: 142270

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 142333

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.250	0.2501		mg/Kg		100	70 - 130
Ethylbenzene	0.250	0.2522		mg/Kg		101	70 - 130
Methyl tert-butyl ether	0.250	0.2458		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.500	0.5219		mg/Kg		104	70 - 130
Naphthalene	0.250	0.2149		mg/Kg		86	70 - 130
o-Xylene	0.250	0.2495		mg/Kg		100	70 - 130
Toluene	0.250	0.2474		mg/Kg		99	70 - 130
C5-C8 Aliphatics (unadjusted)	0.750	0.6939		mg/Kg		93	70 - 130
C9-C10 Aromatics	0.250	0.2485	J	mg/Kg		99	70 - 130
C9-C12 Aliphatics (unadjusted)	0.750	0.7436		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,5-Dibromotoluene (fid)	87		70 - 130
2,5-Dibromotoluene (pid)	91		70 - 130

Lab Sample ID: LCSD 480-142333/3-A

Matrix: Solid

Analysis Batch: 142270

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 142333

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.250	0.2464		mg/Kg		99	70 - 130	2	25
Ethylbenzene	0.250	0.2485		mg/Kg		99	70 - 130	2	25
Methyl tert-butyl ether	0.250	0.2545		mg/Kg		102	70 - 130	3	25
m-Xylene & p-Xylene	0.500	0.5105		mg/Kg		102	70 - 130	2	25
Naphthalene	0.250	0.2248		mg/Kg		90	70 - 130	4	25
o-Xylene	0.250	0.2452		mg/Kg		98	70 - 130	2	25
Toluene	0.250	0.2439		mg/Kg		98	70 - 130	1	25
C5-C8 Aliphatics (unadjusted)	0.750	0.6811		mg/Kg		91	70 - 130	2	25
C9-C10 Aromatics	0.250	0.2419	J	mg/Kg		97	70 - 130	3	25
C9-C12 Aliphatics (unadjusted)	0.750	0.7389		mg/Kg		99	70 - 130	1	25

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCSD 480-142333/3-A

Matrix: Solid

Analysis Batch: 142270

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 142333

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
2,5-Dibromotoluene (fid)	89		70 - 130
2,5-Dibromotoluene (pid)	92		70 - 130

Lab Sample ID: MB 480-142561/1-A

Matrix: Solid

Analysis Batch: 142439

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 142561

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Toluene	<0.0500		0.0500	0.0100	mg/Kg		10/03/13 07:29	10/03/13 08:21	1	
C5-C8 Aliphatics (unadjusted)	0.02244	J	0.250	0.0100	mg/Kg		10/03/13 07:29	10/03/13 08:21	1	
C9-C10 Aromatics	<0.250		0.250	0.0100	mg/Kg		10/03/13 07:29	10/03/13 08:21	1	
C9-C12 Aliphatics (unadjusted)	0.01193	J	0.250	0.0100	mg/Kg		10/03/13 07:29	10/03/13 08:21	1	

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
2,5-Dibromotoluene (fid)	79		70 - 130				10/03/13 07:29	10/03/13 08:21	1	
2,5-Dibromotoluene (pid)	83		70 - 130				10/03/13 07:29	10/03/13 08:21	1	

Lab Sample ID: LCS 480-142561/2-A

Matrix: Solid

Analysis Batch: 142439

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 142561

		Spike	LCS	LCS				%Rec.		
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits		
Toluene		0.250	0.2689		mg/Kg		108	70 - 130		
C5-C8 Aliphatics (unadjusted)		0.750	0.7765		mg/Kg		104	70 - 130		
C9-C10 Aromatics		0.250	0.2601		mg/Kg		104	70 - 130		
C9-C12 Aliphatics (unadjusted)		0.750	0.7872		mg/Kg		105	70 - 130		

	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
2,5-Dibromotoluene (fid)	86		70 - 130							
2,5-Dibromotoluene (pid)	90		70 - 130							

Lab Sample ID: LCSD 480-142561/3-A

Matrix: Solid

Analysis Batch: 142439

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 142561

			Spike	LCSD	LCSD				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene			0.250	0.2652		mg/Kg		106	70 - 130	1	25
C5-C8 Aliphatics (unadjusted)			0.750	0.7564		mg/Kg		101	70 - 130	3	25
C9-C10 Aromatics			0.250	0.2586		mg/Kg		103	70 - 130	1	25
C9-C12 Aliphatics (unadjusted)			0.750	0.7830		mg/Kg		104	70 - 130	1	25
			LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits								
2,5-Dibromotoluene (fid)	86		70 - 130								
2,5-Dibromotoluene (pid)	88		70 - 130								

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Lab Sample ID: MB 240-103632/17-A

Matrix: Solid

Analysis Batch: 104106

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 103632

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0330		0.0330	0.0210	mg/Kg		10/01/13 09:24	10/03/13 22:52	1
PCB-1221	<0.0330		0.0330	0.0160	mg/Kg		10/01/13 09:24	10/03/13 22:52	1
PCB-1232	<0.0330		0.0330	0.0140	mg/Kg		10/01/13 09:24	10/03/13 22:52	1
PCB-1242	<0.0330		0.0330	0.0130	mg/Kg		10/01/13 09:24	10/03/13 22:52	1
PCB-1248	<0.0330		0.0330	0.0170	mg/Kg		10/01/13 09:24	10/03/13 22:52	1
PCB-1254	<0.0330		0.0330	0.0170	mg/Kg		10/01/13 09:24	10/03/13 22:52	1
PCB-1260	<0.0330		0.0330	0.0170	mg/Kg		10/01/13 09:24	10/03/13 22:52	1
PCB-1262	<0.0330		0.0330	0.0270	mg/Kg		10/01/13 09:24	10/03/13 22:52	1
PCB-1268	<0.0330		0.0330	0.0140	mg/Kg		10/01/13 09:24	10/03/13 22:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		30 - 150	10/01/13 09:24	10/03/13 22:52	1
Tetrachloro-m-xylene	104		30 - 150	10/01/13 09:24	10/03/13 22:52	1
DCB Decachlorobiphenyl	87		30 - 150	10/01/13 09:24	10/03/13 22:52	1
DCB Decachlorobiphenyl	98		30 - 150	10/01/13 09:24	10/03/13 22:52	1

Lab Sample ID: LCS 240-103632/18-A

Matrix: Solid

Analysis Batch: 104106

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 103632

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.333	0.2862		mg/Kg		86	40 - 140
PCB-1260	0.333	0.3211		mg/Kg		96	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	83		30 - 150
Tetrachloro-m-xylene	103		30 - 150
DCB Decachlorobiphenyl	86		30 - 150
DCB Decachlorobiphenyl	96		30 - 150

Lab Sample ID: LCSD 240-103632/19-A

Matrix: Solid

Analysis Batch: 104106

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 103632

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.333	0.3018		mg/Kg		91	40 - 140	5	30
PCB-1260	0.333	0.3234		mg/Kg		97	40 - 140	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	90		30 - 150
Tetrachloro-m-xylene	93		30 - 150
DCB Decachlorobiphenyl	84		30 - 150
DCB Decachlorobiphenyl	92		30 - 150

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: 480-46783-14 MS

Matrix: Solid

Analysis Batch: 104275

Client Sample ID: WCSB-5 (2.5-3)

Prep Type: Total/NA

Prep Batch: 103632

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	<19.8		0.400	<19.8		mg/Kg	✱	NC	40 - 140
PCB-1260	37.5		0.400	39.09	4	mg/Kg	✱	397	40 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	0	X	30 - 150
Tetrachloro-m-xylene	0	X	30 - 150
DCB Decachlorobiphenyl	0	X	30 - 150
DCB Decachlorobiphenyl	0	X	30 - 150

Lab Sample ID: 480-46783-14 MSD

Matrix: Solid

Analysis Batch: 104275

Client Sample ID: WCSB-5 (2.5-3)

Prep Type: Total/NA

Prep Batch: 103632

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	<19.8		0.396	<19.6		mg/Kg	✱	NC	40 - 140	NC	50
PCB-1260	37.5		0.396	36.14	4	mg/Kg	✱	-344	40 - 140	8	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	0	X	30 - 150
Tetrachloro-m-xylene	0	X	30 - 150
DCB Decachlorobiphenyl	0	X	30 - 150
DCB Decachlorobiphenyl	0	X	30 - 150

Lab Sample ID: MB 240-103651/23-A

Matrix: Solid

Analysis Batch: 103948

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 103651

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0330		0.0330	0.0210	mg/Kg		10/01/13 10:09	10/03/13 11:41	1
PCB-1221	<0.0330		0.0330	0.0160	mg/Kg		10/01/13 10:09	10/03/13 11:41	1
PCB-1232	<0.0330		0.0330	0.0140	mg/Kg		10/01/13 10:09	10/03/13 11:41	1
PCB-1242	<0.0330		0.0330	0.0130	mg/Kg		10/01/13 10:09	10/03/13 11:41	1
PCB-1248	<0.0330		0.0330	0.0170	mg/Kg		10/01/13 10:09	10/03/13 11:41	1
PCB-1254	<0.0330		0.0330	0.0170	mg/Kg		10/01/13 10:09	10/03/13 11:41	1
PCB-1260	<0.0330		0.0330	0.0170	mg/Kg		10/01/13 10:09	10/03/13 11:41	1
PCB-1262	<0.0330		0.0330	0.0270	mg/Kg		10/01/13 10:09	10/03/13 11:41	1
PCB-1268	<0.0330		0.0330	0.0140	mg/Kg		10/01/13 10:09	10/03/13 11:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		30 - 150	10/01/13 10:09	10/03/13 11:41	1
Tetrachloro-m-xylene	222	X	30 - 150	10/01/13 10:09	10/03/13 11:41	1
DCB Decachlorobiphenyl	85		30 - 150	10/01/13 10:09	10/03/13 11:41	1
DCB Decachlorobiphenyl	91		30 - 150	10/01/13 10:09	10/03/13 11:41	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: LCS 240-103651/24-A

Matrix: Solid

Analysis Batch: 104145

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 103651

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.333	0.2593		mg/Kg		78	40 - 140
PCB-1260	0.333	0.2729		mg/Kg		82	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	85		30 - 150
Tetrachloro-m-xylene	87		30 - 150
DCB Decachlorobiphenyl	67		30 - 150
DCB Decachlorobiphenyl	212	X	30 - 150

Lab Sample ID: LCSD 240-103651/25-A

Matrix: Solid

Analysis Batch: 104246

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 103651

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.333	0.2902		mg/Kg		87	40 - 140	11	30
PCB-1260	0.333	0.2867		mg/Kg		86	40 - 140	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	88		30 - 150
Tetrachloro-m-xylene	92		30 - 150
DCB Decachlorobiphenyl	64		30 - 150
DCB Decachlorobiphenyl	80		30 - 150

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 480-141819/1-B

Matrix: Solid

Analysis Batch: 142271

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 141819

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	<4.88		4.88	1.95	mg/Kg		09/30/13 08:34	10/02/13 12:23	1
C19-C36 Aliphatics	<4.88		4.88	1.95	mg/Kg		09/30/13 08:34	10/02/13 12:23	1
C9-C18 Aliphatics	2.124	J	4.88	1.95	mg/Kg		09/30/13 08:34	10/02/13 12:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	56		40 - 140	09/30/13 08:34	10/02/13 12:23	1
2-Bromonaphthalene	95		40 - 140	09/30/13 08:34	10/02/13 12:23	1
2-Fluorobiphenyl	107		40 - 140	09/30/13 08:34	10/02/13 12:23	1
o-Terphenyl	92		40 - 140	09/30/13 08:34	10/02/13 12:23	1

Lab Sample ID: LCS 480-141819/2-B

Matrix: Solid

Analysis Batch: 142271

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 141819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C11-C22 Aromatics (unadjusted)	81.6	73.42		mg/Kg		90	40 - 140
C19-C36 Aliphatics	38.4	27.25		mg/Kg		71	40 - 140

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCS 480-141819/2-B

Matrix: Solid

Analysis Batch: 142271

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 141819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C9-C18 Aliphatics	28.8	18.09		mg/Kg		63	40 - 140
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctadecane	61		40 - 140				
2-Bromonaphthalene	99		40 - 140				
2-Fluorobiphenyl	113		40 - 140				
o-Terphenyl	94		40 - 140				

Lab Sample ID: LCSD 480-141819/3-B

Matrix: Solid

Analysis Batch: 142271

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 141819

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C11-C22 Aromatics (unadjusted)	81.3	70.92		mg/Kg		87	40 - 140	3	25
C19-C36 Aliphatics	38.3	27.67		mg/Kg		72	40 - 140	2	25
C9-C18 Aliphatics	28.7	18.76		mg/Kg		65	40 - 140	4	25
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctadecane	62		40 - 140						
2-Bromonaphthalene	99		40 - 140						
2-Fluorobiphenyl	107		40 - 140						
o-Terphenyl	91		40 - 140						

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-141839/1-A

Matrix: Solid

Analysis Batch: 142236

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 141839

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.551		0.551	0.220	mg/Kg		09/30/13 14:10	10/01/13 19:47	1
Arsenic	<1.10		1.10	0.441	mg/Kg		09/30/13 14:10	10/01/13 19:47	1
Barium	<0.551		0.551	0.121	mg/Kg		09/30/13 14:10	10/01/13 19:47	1
Beryllium	<0.220		0.220	0.0309	mg/Kg		09/30/13 14:10	10/01/13 19:47	1
Cadmium	<0.220	^	0.220	0.0331	mg/Kg		09/30/13 14:10	10/01/13 19:47	1
Chromium	<0.551		0.551	0.220	mg/Kg		09/30/13 14:10	10/01/13 19:47	1
Nickel	<1.10		1.10	0.253	mg/Kg		09/30/13 14:10	10/01/13 19:47	1
Thallium	<1.10		1.10	0.331	mg/Kg		09/30/13 14:10	10/01/13 19:47	1
Vanadium	<0.551		0.551	0.121	mg/Kg		09/30/13 14:10	10/01/13 19:47	1
Zinc	0.2622	J	2.75	0.169	mg/Kg		09/30/13 14:10	10/01/13 19:47	1
Lead	<0.551		0.551	0.264	mg/Kg		09/30/13 14:10	10/01/13 19:47	1
Selenium	<0.551	^	0.551	0.441	mg/Kg		09/30/13 14:10	10/01/13 19:47	1
Antimony	<0.551	^	0.551	0.441	mg/Kg		09/30/13 14:10	10/01/13 19:47	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-141839/3-A LCDSRM
Matrix: Solid
Analysis Batch: 142236

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 141839

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	61.3	56.97		mg/Kg		92.9	66.9 - 133.1	2	20
Arsenic	182	174.6		mg/Kg		95.9	70.9 - 129.7	2	20
Barium	143	133.0		mg/Kg		93.0	72.7 - 128.0	2	20
Beryllium	98.3	94.27		mg/Kg		95.9	74.6 - 125.1	1	20
Cadmium	60.4	57.62 ^		mg/Kg		95.4	73.2 - 129.3	2	20
Chromium	125	113.4		mg/Kg		90.7	69.8 - 129.6	1	20
Nickel	128	125.9		mg/Kg		98.3	73.1 - 129.7	2	20
Thallium	144	141.6		mg/Kg		98.3	68.3 - 131.9	3	20
Vanadium	104	93.17		mg/Kg		89.6	66.0 - 133.7	1	20
Zinc	204	184.2		mg/Kg		90.3	69.6 - 129.9	2	20
Lead	136	131.1		mg/Kg		96.4	73.1 - 127.2	2	20
Selenium	85.9	81.26 ^		mg/Kg		94.6	63.9 - 136.2	3	20
Antimony	106	62.03 ^		mg/Kg		58.5	23.1 - 255.7	5	20

Lab Sample ID: LCSSRM 480-141839/2-A
Matrix: Solid
Analysis Batch: 142236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 141839

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	61.4	58.02		mg/Kg		94.5	66.9 - 133.1		
Arsenic	182	178.6		mg/Kg		98.0	70.9 - 129.7		
Barium	143	135.8		mg/Kg		94.9	72.7 - 128.0		
Beryllium	98.4	95.67		mg/Kg		97.2	74.6 - 125.1		
Cadmium	60.5	58.58 ^		mg/Kg		96.9	73.2 - 129.3		
Chromium	125	115.0		mg/Kg		91.9	69.8 - 129.6		
Nickel	128	128.2		mg/Kg		100.0	73.1 - 129.7		
Thallium	144	145.9		mg/Kg		101.2	68.3 - 131.9		
Vanadium	104	94.51		mg/Kg		90.8	66.0 - 133.7		
Zinc	204	188.1		mg/Kg		92.1	69.6 - 129.9		
Lead	136	133.9		mg/Kg		98.4	73.1 - 127.2		

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-141839/2-A

Matrix: Solid

Analysis Batch: 142236

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 141839

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	86.0	83.43	^	mg/Kg		97.0	63.9 - 136.2
Antimony	106	58.92	^	mg/Kg		55.5	23.1 - 255.7

Lab Sample ID: 480-46783-20 MS

Matrix: Solid

Analysis Batch: 142236

Client Sample ID: WCSB-1 (2.5-3) MS

Prep Type: Total/NA

Prep Batch: 141839

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<0.711		13.9	11.38		mg/Kg	☼	82	75 - 125
Arsenic	19.3		55.6	70.50		mg/Kg	☼	92	75 - 125
Barium	21.5		55.6	68.12		mg/Kg	☼	84	75 - 125
Beryllium	0.577		55.6	47.13		mg/Kg	☼	84	75 - 125
Cadmium	<0.284	^	55.6	47.45	^	mg/Kg	☼	85	75 - 125
Chromium	17.6		55.6	70.49		mg/Kg	☼	95	75 - 125
Nickel	22.8		55.6	80.23		mg/Kg	☼	103	75 - 125
Thallium	<1.42		55.6	51.69		mg/Kg	☼	93	75 - 125
Vanadium	26.9		55.6	87.28		mg/Kg	☼	109	75 - 125
Zinc	82.6	B	55.6	97.08	F	mg/Kg	☼	26	75 - 125
Lead	183		55.6	227.5		mg/Kg	☼	81	75 - 125
Selenium	1.10	^	55.6	47.92	^	mg/Kg	☼	84	75 - 125
Antimony	<0.711	^	55.6	40.86	^ F	mg/Kg	☼	74	75 - 125

Lab Sample ID: 480-46783-20 MSD

Matrix: Solid

Analysis Batch: 142236

Client Sample ID: WCSB-1 (2.5-3) MSD

Prep Type: Total/NA

Prep Batch: 141839

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Silver	<0.711		15.4	13.17		mg/Kg	☼	85	75 - 125	15	35
Arsenic	19.3		61.8	74.30		mg/Kg	☼	89	75 - 125	5	35
Barium	21.5		61.8	74.22		mg/Kg	☼	85	75 - 125	9	35
Beryllium	0.577		61.8	54.23		mg/Kg	☼	87	75 - 125	14	35
Cadmium	<0.284	^	61.8	54.68	^	mg/Kg	☼	88	75 - 125	14	35
Chromium	17.6		61.8	82.12		mg/Kg	☼	104	75 - 125	15	35
Nickel	22.8		61.8	79.67		mg/Kg	☼	92	75 - 125	1	35
Thallium	<1.42		61.8	57.66		mg/Kg	☼	93	75 - 125	11	35
Vanadium	26.9		61.8	86.89		mg/Kg	☼	97	75 - 125	0	35
Zinc	82.6	B	61.8	98.36	F	mg/Kg	☼	26	75 - 125	1	35
Lead	183		61.8	376.0	F	mg/Kg	☼	313	75 - 125	49	35
Selenium	1.10	^	61.8	53.83	^	mg/Kg	☼	85	75 - 125	12	35
Antimony	<0.711	^	61.8	47.09	^	mg/Kg	☼	76	75 - 125	14	35

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-141828/1-A

Matrix: Solid

Analysis Batch: 141897

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 141828

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.101		0.101	0.00814	mg/Kg		09/30/13 10:40	09/30/13 12:03	1

Lab Sample ID: LCDSRM 480-141828/23-A LCDSRM

Matrix: Solid

Analysis Batch: 141897

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 141828

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.77	3.629		mg/Kg		96.3	50.9 - 149. 1	4	

Lab Sample ID: LCSSRM 480-141828/2-A

Matrix: Solid

Analysis Batch: 141897

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 141828

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.77	3.778		mg/Kg		100.2	50.9 - 149. 1		

Lab Sample ID: 480-46783-20 MS

Matrix: Solid

Analysis Batch: 141897

Client Sample ID: WCSB-1 (2.5-3) MS

Prep Type: Total/NA

Prep Batch: 141828

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0171	J	0.468	0.4809		mg/Kg	⊛	99	75 - 125		

Lab Sample ID: 480-46783-20 MSD

Matrix: Solid

Analysis Batch: 141897

Client Sample ID: WCSB-1 (2.5-3) MSD

Prep Type: Total/NA

Prep Batch: 141828

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0171	J	0.465	0.4614		mg/Kg	⊛	96	75 - 125	4	35

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

GC/MS VOA

Analysis Batch: 142036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-5	WCSB-7 (7.5-8)	Total/NA	Solid	8260C	142057
480-46783-8	WCSB-8 (7-8)	Total/NA	Solid	8260C	142057
480-46783-10	WCSB-6 (4-5)	Total/NA	Solid	8260C	142057
480-46783-11	WCSB-6 (8-9)	Total/NA	Solid	8260C	142057
480-46783-17	WCSB-4 (6-7)	Total/NA	Solid	8260C	142057
LCS 480-142036/6	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 480-142036/7	Lab Control Sample Dup	Total/NA	Solid	8260C	
MB 480-142036/8	Method Blank	Total/NA	Solid	8260C	

Prep Batch: 142057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-5	WCSB-7 (7.5-8)	Total/NA	Solid	5035	
480-46783-8	WCSB-8 (7-8)	Total/NA	Solid	5035	
480-46783-10	WCSB-6 (4-5)	Total/NA	Solid	5035	
480-46783-11	WCSB-6 (8-9)	Total/NA	Solid	5035	
480-46783-17	WCSB-4 (6-7)	Total/NA	Solid	5035	

Analysis Batch: 142288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-1	WCSB-11 (1-2)	Total/NA	Solid	8260C	142297
480-46783-4	WCSB-7 (4-5)	Total/NA	Solid	8260C	142297
480-46783-15	TB-09252013	Total/NA	Solid	8260C	142297
480-46783-19	WCSB-1 (1-2)	Total/NA	Solid	8260C	142297
480-46783-21	WCSB-1 (7-8)	Total/NA	Solid	8260C	142297
LCS 480-142288/4	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 480-142288/5	Lab Control Sample Dup	Total/NA	Solid	8260C	
MB 480-142288/6	Method Blank	Total/NA	Solid	8260C	

Prep Batch: 142297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-1	WCSB-11 (1-2)	Total/NA	Solid	5035	
480-46783-4	WCSB-7 (4-5)	Total/NA	Solid	5035	
480-46783-15	TB-09252013	Total/NA	Solid	5035	
480-46783-19	WCSB-1 (1-2)	Total/NA	Solid	5035	
480-46783-21	WCSB-1 (7-8)	Total/NA	Solid	5035	

Analysis Batch: 142492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-6	WCSB-8 (2-2.5)	Total/NA	Solid	8260C	142564
480-46783-12	WCSB-5 (0.5-1.5)	Total/NA	Solid	8260C	142564
480-46783-13	WCSB-5 (5-6)	Total/NA	Solid	8260C	142564
LCS 480-142564/1-A	Lab Control Sample	Total/NA	Solid	8260C	142564
LCSD 480-142564/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	142564
MB 480-142564/3-A	Method Blank	Total/NA	Solid	8260C	142564

Prep Batch: 142564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-6	WCSB-8 (2-2.5)	Total/NA	Solid	5035	
480-46783-6 - DL	WCSB-8 (2-2.5)	Total/NA	Solid	5035	
480-46783-12	WCSB-5 (0.5-1.5)	Total/NA	Solid	5035	
480-46783-12 - DL	WCSB-5 (0.5-1.5)	Total/NA	Solid	5035	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

GC/MS VOA (Continued)

Prep Batch: 142564 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-13	WCSB-5 (5-6)	Total/NA	Solid	5035	
480-46783-13 - DL	WCSB-5 (5-6)	Total/NA	Solid	5035	
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	5035	
480-46783-18	WCSB-2 (14-15)	Total/NA	Solid	5035	
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	5035	
LCS 480-142564/10-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 480-142564/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 480-142564/11-A	Lab Control Sample Dup	Total/NA	Solid	5035	
LCSD 480-142564/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 480-142564/12-A	Method Blank	Total/NA	Solid	5035	
MB 480-142564/3-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 142727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-6 - DL	WCSB-8 (2-2.5)	Total/NA	Solid	8260C	142564
480-46783-12 - DL	WCSB-5 (0.5-1.5)	Total/NA	Solid	8260C	142564
480-46783-13 - DL	WCSB-5 (5-6)	Total/NA	Solid	8260C	142564
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	8260C	142564
480-46783-18	WCSB-2 (14-15)	Total/NA	Solid	8260C	142564
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	8260C	142564
LCS 480-142564/10-A	Lab Control Sample	Total/NA	Solid	8260C	142564
LCSD 480-142564/11-A	Lab Control Sample Dup	Total/NA	Solid	8260C	142564
MB 480-142564/12-A	Method Blank	Total/NA	Solid	8260C	142564

Analysis Batch: 143062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-22	WCSB-3 (5-6)	Total/NA	Solid	8260C	143065
LCS 480-143062/7	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 480-143062/8	Lab Control Sample Dup	Total/NA	Solid	8260C	
MB 480-143062/9	Method Blank	Total/NA	Solid	8260C	

Prep Batch: 143065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-22	WCSB-3 (5-6)	Total/NA	Solid	5035	

GC VOA

Prep Batch: 142077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-1	WCSB-11 (1-2)	Total/NA	Solid	5035	
480-46783-4	WCSB-7 (4-5)	Total/NA	Solid	5035	
480-46783-6	WCSB-8 (2-2.5)	Total/NA	Solid	5035	
480-46783-8	WCSB-8 (7-8)	Total/NA	Solid	5035	
480-46783-11	WCSB-6 (8-9)	Total/NA	Solid	5035	
480-46783-13	WCSB-5 (5-6)	Total/NA	Solid	5035	
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	5035	
480-46783-23	WCSB-3 (7-8)	Total/NA	Solid	5035	
LCS 480-142077/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 480-142077/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 480-142077/1-A	Method Blank	Total/NA	Solid	5035	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

GC VOA (Continued)

Analysis Batch: 142133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-4	WCSB-7 (4-5)	Total/NA	Solid	MAVPH	142077
480-46783-6	WCSB-8 (2-2.5)	Total/NA	Solid	MAVPH	142077
480-46783-13	WCSB-5 (5-6)	Total/NA	Solid	MAVPH	142077
LCS 480-142077/2-A	Lab Control Sample	Total/NA	Solid	MAVPH	142077
LCSD 480-142077/3-A	Lab Control Sample Dup	Total/NA	Solid	MAVPH	142077
MB 480-142077/1-A	Method Blank	Total/NA	Solid	MAVPH	142077

Analysis Batch: 142270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	MAVPH	142077
480-46783-23	WCSB-3 (7-8)	Total/NA	Solid	MAVPH	142077
LCS 480-142333/2-A	Lab Control Sample	Total/NA	Solid	MAVPH	142333
LCSD 480-142333/3-A	Lab Control Sample Dup	Total/NA	Solid	MAVPH	142333
MB 480-142333/1-A	Method Blank	Total/NA	Solid	MAVPH	142333

Prep Batch: 142333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-142333/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 480-142333/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 480-142333/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 142439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-1	WCSB-11 (1-2)	Total/NA	Solid	MAVPH	142077
480-46783-8	WCSB-8 (7-8)	Total/NA	Solid	MAVPH	142077
480-46783-11	WCSB-6 (8-9)	Total/NA	Solid	MAVPH	142077
LCS 480-142561/2-A	Lab Control Sample	Total/NA	Solid	MAVPH	142561
LCSD 480-142561/3-A	Lab Control Sample Dup	Total/NA	Solid	MAVPH	142561
MB 480-142561/1-A	Method Blank	Total/NA	Solid	MAVPH	142561

Prep Batch: 142561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-142561/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 480-142561/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 480-142561/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 143179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-1	WCSB-11 (1-2)	Total/NA	Solid	MA VPH	
480-46783-4	WCSB-7 (4-5)	Total/NA	Solid	MA VPH	
480-46783-6	WCSB-8 (2-2.5)	Total/NA	Solid	MA VPH	
480-46783-8	WCSB-8 (7-8)	Total/NA	Solid	MA VPH	
480-46783-11	WCSB-6 (8-9)	Total/NA	Solid	MA VPH	
480-46783-13	WCSB-5 (5-6)	Total/NA	Solid	MA VPH	
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	MA VPH	
480-46783-23	WCSB-3 (7-8)	Total/NA	Solid	MA VPH	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

GC Semi VOA

Prep Batch: 103632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-3	WCSB-7 (2.5-3)	Total/NA	Solid	3540C	
480-46783-7	WCSB-8 (2.5-3)	Total/NA	Solid	3540C	
480-46783-8	WCSB-8 (7-8)	Total/NA	Solid	3540C	
480-46783-9	WCSB-6 (2.5-3)	Total/NA	Solid	3540C	
480-46783-12	WCSB-5 (0.5-1.5)	Total/NA	Solid	3540C	
480-46783-14	WCSB-5 (2.5-3)	Total/NA	Solid	3540C	
480-46783-14 MS	WCSB-5 (2.5-3)	Total/NA	Solid	3540C	
480-46783-14 MSD	WCSB-5 (2.5-3)	Total/NA	Solid	3540C	
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	3540C	
480-46783-17	WCSB-4 (6-7)	Total/NA	Solid	3540C	
480-46783-19	WCSB-1 (1-2)	Total/NA	Solid	3540C	
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	3540C	
480-46783-21	WCSB-1 (7-8)	Total/NA	Solid	3540C	
480-46783-23	WCSB-3 (7-8)	Total/NA	Solid	3540C	
480-46783-25	WCSB-9 (2.5-3)	Total/NA	Solid	3540C	
480-46783-26	WCSB-909 (2.5-3)	Total/NA	Solid	3540C	
LCS 240-103632/18-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-103632/19-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-103632/17-A	Method Blank	Total/NA	Solid	3540C	

Prep Batch: 103651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-2	WCSB-11 (2.5-3)	Total/NA	Solid	3540C	
LCS 240-103651/24-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-103651/25-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-103651/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 103948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-103651/23-A	Method Blank	Total/NA	Solid	8082	103651

Analysis Batch: 104106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-8	WCSB-8 (7-8)	Total/NA	Solid	8082	103632
480-46783-12	WCSB-5 (0.5-1.5)	Total/NA	Solid	8082	103632
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	8082	103632
480-46783-17	WCSB-4 (6-7)	Total/NA	Solid	8082	103632
480-46783-19	WCSB-1 (1-2)	Total/NA	Solid	8082	103632
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	8082	103632
480-46783-21	WCSB-1 (7-8)	Total/NA	Solid	8082	103632
480-46783-23	WCSB-3 (7-8)	Total/NA	Solid	8082	103632
480-46783-25	WCSB-9 (2.5-3)	Total/NA	Solid	8082	103632
480-46783-26	WCSB-909 (2.5-3)	Total/NA	Solid	8082	103632
LCS 240-103632/18-A	Lab Control Sample	Total/NA	Solid	8082	103632
LCSD 240-103632/19-A	Lab Control Sample Dup	Total/NA	Solid	8082	103632
MB 240-103632/17-A	Method Blank	Total/NA	Solid	8082	103632

Analysis Batch: 104145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-103651/24-A	Lab Control Sample	Total/NA	Solid	8082	103651

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

GC Semi VOA (Continued)

Analysis Batch: 104246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-2	WCSB-11 (2.5-3)	Total/NA	Solid	8082	103651
LCSD 240-103651/25-A	Lab Control Sample Dup	Total/NA	Solid	8082	103651

Analysis Batch: 104275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-3	WCSB-7 (2.5-3)	Total/NA	Solid	8082	103632
480-46783-7	WCSB-8 (2.5-3)	Total/NA	Solid	8082	103632
480-46783-14	WCSB-5 (2.5-3)	Total/NA	Solid	8082	103632
480-46783-14 MS	WCSB-5 (2.5-3)	Total/NA	Solid	8082	103632
480-46783-14 MSD	WCSB-5 (2.5-3)	Total/NA	Solid	8082	103632

Analysis Batch: 104379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-9	WCSB-6 (2.5-3)	Total/NA	Solid	8082	103632

Prep Batch: 141819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-1	WCSB-11 (1-2)	Total/NA	Solid	3546	
480-46783-4	WCSB-7 (4-5)	Total/NA	Solid	3546	
480-46783-6	WCSB-8 (2-2.5)	Total/NA	Solid	3546	
480-46783-8	WCSB-8 (7-8)	Total/NA	Solid	3546	
480-46783-11	WCSB-6 (8-9)	Total/NA	Solid	3546	
480-46783-12	WCSB-5 (0.5-1.5)	Total/NA	Solid	3546	
480-46783-13	WCSB-5 (5-6)	Total/NA	Solid	3546	
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	3546	
480-46783-17	WCSB-4 (6-7)	Total/NA	Solid	3546	
480-46783-19	WCSB-1 (1-2)	Total/NA	Solid	3546	
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	3546	
480-46783-21	WCSB-1 (7-8)	Total/NA	Solid	3546	
480-46783-23	WCSB-3 (7-8)	Total/NA	Solid	3546	
480-46783-24	WCSB-9 (1-2)	Total/NA	Solid	3546	
LCS 480-141819/2-B	Lab Control Sample	Total/NA	Solid	3546	
LCSD 480-141819/3-B	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 480-141819/1-B	Method Blank	Total/NA	Solid	3546	

Fraction Batch: 141975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-1	WCSB-11 (1-2)	Total/NA	Solid	MA EPH Frac	141819
480-46783-4	WCSB-7 (4-5)	Total/NA	Solid	MA EPH Frac	141819
480-46783-6	WCSB-8 (2-2.5)	Total/NA	Solid	MA EPH Frac	141819
480-46783-8	WCSB-8 (7-8)	Total/NA	Solid	MA EPH Frac	141819
480-46783-11	WCSB-6 (8-9)	Total/NA	Solid	MA EPH Frac	141819
480-46783-12	WCSB-5 (0.5-1.5)	Total/NA	Solid	MA EPH Frac	141819
480-46783-13	WCSB-5 (5-6)	Total/NA	Solid	MA EPH Frac	141819
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	MA EPH Frac	141819
480-46783-17	WCSB-4 (6-7)	Total/NA	Solid	MA EPH Frac	141819
480-46783-19	WCSB-1 (1-2)	Total/NA	Solid	MA EPH Frac	141819
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	MA EPH Frac	141819
480-46783-21	WCSB-1 (7-8)	Total/NA	Solid	MA EPH Frac	141819
480-46783-23	WCSB-3 (7-8)	Total/NA	Solid	MA EPH Frac	141819
480-46783-24	WCSB-9 (1-2)	Total/NA	Solid	MA EPH Frac	141819

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

GC Semi VOA (Continued)

Fraction Batch: 141975 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-141819/2-B	Lab Control Sample	Total/NA	Solid	MA EPH Frac	141819
LCSD 480-141819/3-B	Lab Control Sample Dup	Total/NA	Solid	MA EPH Frac	141819
MB 480-141819/1-B	Method Blank	Total/NA	Solid	MA EPH Frac	141819

Analysis Batch: 142271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-4	WCSB-7 (4-5)	Total/NA	Solid	MA-EPH	141975
480-46783-6	WCSB-8 (2-2.5)	Total/NA	Solid	MA-EPH	141975
480-46783-8	WCSB-8 (7-8)	Total/NA	Solid	MA-EPH	141975
480-46783-11	WCSB-6 (8-9)	Total/NA	Solid	MA-EPH	141975
480-46783-12	WCSB-5 (0.5-1.5)	Total/NA	Solid	MA-EPH	141975
480-46783-13	WCSB-5 (5-6)	Total/NA	Solid	MA-EPH	141975
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	MA-EPH	141975
480-46783-17	WCSB-4 (6-7)	Total/NA	Solid	MA-EPH	141975
480-46783-19	WCSB-1 (1-2)	Total/NA	Solid	MA-EPH	141975
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	MA-EPH	141975
480-46783-21	WCSB-1 (7-8)	Total/NA	Solid	MA-EPH	141975
480-46783-23	WCSB-3 (7-8)	Total/NA	Solid	MA-EPH	141975
480-46783-24	WCSB-9 (1-2)	Total/NA	Solid	MA-EPH	141975
LCS 480-141819/2-B	Lab Control Sample	Total/NA	Solid	MA-EPH	141975
LCSD 480-141819/3-B	Lab Control Sample Dup	Total/NA	Solid	MA-EPH	141975
MB 480-141819/1-B	Method Blank	Total/NA	Solid	MA-EPH	141975

Analysis Batch: 142699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-1	WCSB-11 (1-2)	Total/NA	Solid	MA-EPH	141975

Analysis Batch: 142792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-1	WCSB-11 (1-2)	Total/NA	Solid	MA-EPH	
480-46783-4	WCSB-7 (4-5)	Total/NA	Solid	MA-EPH	
480-46783-6	WCSB-8 (2-2.5)	Total/NA	Solid	MA-EPH	
480-46783-8	WCSB-8 (7-8)	Total/NA	Solid	MA-EPH	
480-46783-11	WCSB-6 (8-9)	Total/NA	Solid	MA-EPH	
480-46783-12	WCSB-5 (0.5-1.5)	Total/NA	Solid	MA-EPH	
480-46783-13	WCSB-5 (5-6)	Total/NA	Solid	MA-EPH	
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	MA-EPH	
480-46783-17	WCSB-4 (6-7)	Total/NA	Solid	MA-EPH	
480-46783-19	WCSB-1 (1-2)	Total/NA	Solid	MA-EPH	
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	MA-EPH	
480-46783-21	WCSB-1 (7-8)	Total/NA	Solid	MA-EPH	
480-46783-23	WCSB-3 (7-8)	Total/NA	Solid	MA-EPH	
480-46783-24	WCSB-9 (1-2)	Total/NA	Solid	MA-EPH	

Metals

Prep Batch: 141828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-2	WCSB-11 (2.5-3)	Total/NA	Solid	7471A	
480-46783-3	WCSB-7 (2.5-3)	Total/NA	Solid	7471A	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Metals (Continued)

Prep Batch: 141828 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-7	WCSB-8 (2.5-3)	Total/NA	Solid	7471A	
480-46783-9	WCSB-6 (2.5-3)	Total/NA	Solid	7471A	
480-46783-14	WCSB-5 (2.5-3)	Total/NA	Solid	7471A	
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	7471A	
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	7471A	
480-46783-20 MS	WCSB-1 (2.5-3) MS	Total/NA	Solid	7471A	
480-46783-20 MSD	WCSB-1 (2.5-3) MSD	Total/NA	Solid	7471A	
480-46783-25	WCSB-9 (2.5-3)	Total/NA	Solid	7471A	
480-46783-27	WCSB-10 (2.5-3)	Total/NA	Solid	7471A	
LCDSRM 480-141828/23-A LCC	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-141828/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-141828/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 141839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-2	WCSB-11 (2.5-3)	Total/NA	Solid	3050B	
480-46783-3	WCSB-7 (2.5-3)	Total/NA	Solid	3050B	
480-46783-7	WCSB-8 (2.5-3)	Total/NA	Solid	3050B	
480-46783-9	WCSB-6 (2.5-3)	Total/NA	Solid	3050B	
480-46783-14	WCSB-5 (2.5-3)	Total/NA	Solid	3050B	
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	3050B	
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	3050B	
480-46783-20 MS	WCSB-1 (2.5-3) MS	Total/NA	Solid	3050B	
480-46783-20 MSD	WCSB-1 (2.5-3) MSD	Total/NA	Solid	3050B	
480-46783-25	WCSB-9 (2.5-3)	Total/NA	Solid	3050B	
480-46783-27	WCSB-10 (2.5-3)	Total/NA	Solid	3050B	
LCDSRM 480-141839/3-A LCDSE	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-141839/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-141839/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 141897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-2	WCSB-11 (2.5-3)	Total/NA	Solid	7471A	141828
480-46783-3	WCSB-7 (2.5-3)	Total/NA	Solid	7471A	141828
480-46783-7	WCSB-8 (2.5-3)	Total/NA	Solid	7471A	141828
480-46783-9	WCSB-6 (2.5-3)	Total/NA	Solid	7471A	141828
480-46783-14	WCSB-5 (2.5-3)	Total/NA	Solid	7471A	141828
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	7471A	141828
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	7471A	141828
480-46783-20 MS	WCSB-1 (2.5-3) MS	Total/NA	Solid	7471A	141828
480-46783-20 MSD	WCSB-1 (2.5-3) MSD	Total/NA	Solid	7471A	141828
480-46783-25	WCSB-9 (2.5-3)	Total/NA	Solid	7471A	141828
480-46783-27	WCSB-10 (2.5-3)	Total/NA	Solid	7471A	141828
LCDSRM 480-141828/23-A LCC	Lab Control Sample Dup	Total/NA	Solid	7471A	141828
LCSSRM 480-141828/2-A	Lab Control Sample	Total/NA	Solid	7471A	141828
MB 480-141828/1-A	Method Blank	Total/NA	Solid	7471A	141828

Analysis Batch: 142236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-2	WCSB-11 (2.5-3)	Total/NA	Solid	6010	141839
480-46783-3	WCSB-7 (2.5-3)	Total/NA	Solid	6010	141839

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Metals (Continued)

Analysis Batch: 142236 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-7	WCSB-8 (2.5-3)	Total/NA	Solid	6010	141839
480-46783-9	WCSB-6 (2.5-3)	Total/NA	Solid	6010	141839
480-46783-14	WCSB-5 (2.5-3)	Total/NA	Solid	6010	141839
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	6010	141839
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	6010	141839
480-46783-20 MS	WCSB-1 (2.5-3) MS	Total/NA	Solid	6010	141839
480-46783-20 MSD	WCSB-1 (2.5-3) MSD	Total/NA	Solid	6010	141839
480-46783-25	WCSB-9 (2.5-3)	Total/NA	Solid	6010	141839
480-46783-27	WCSB-10 (2.5-3)	Total/NA	Solid	6010	141839
LCDSRM 480-141839/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	6010	141839
LCSSRM 480-141839/2-A	Lab Control Sample	Total/NA	Solid	6010	141839
MB 480-141839/1-A	Method Blank	Total/NA	Solid	6010	141839

Analysis Batch: 142509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-3	WCSB-7 (2.5-3)	Total/NA	Solid	6010	141839

General Chemistry

Analysis Batch: 104009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-26	WCSB-909 (2.5-3)	Total/NA	Solid	Moisture	

Analysis Batch: 141727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-1	WCSB-11 (1-2)	Total/NA	Solid	Moisture	
480-46783-2	WCSB-11 (2.5-3)	Total/NA	Solid	Moisture	
480-46783-3	WCSB-7 (2.5-3)	Total/NA	Solid	Moisture	
480-46783-4	WCSB-7 (4-5)	Total/NA	Solid	Moisture	
480-46783-5	WCSB-7 (7.5-8)	Total/NA	Solid	Moisture	
480-46783-6	WCSB-8 (2-2.5)	Total/NA	Solid	Moisture	
480-46783-7	WCSB-8 (2.5-3)	Total/NA	Solid	Moisture	
480-46783-8	WCSB-8 (7-8)	Total/NA	Solid	Moisture	
480-46783-9	WCSB-6 (2.5-3)	Total/NA	Solid	Moisture	
480-46783-10	WCSB-6 (4-5)	Total/NA	Solid	Moisture	
480-46783-11	WCSB-6 (8-9)	Total/NA	Solid	Moisture	
480-46783-12	WCSB-5 (0.5-1.5)	Total/NA	Solid	Moisture	
480-46783-13	WCSB-5 (5-6)	Total/NA	Solid	Moisture	
480-46783-14	WCSB-5 (2.5-3)	Total/NA	Solid	Moisture	
480-46783-16	WCSB-4 (2.5-3)	Total/NA	Solid	Moisture	
480-46783-17	WCSB-4 (6-7)	Total/NA	Solid	Moisture	
480-46783-18	WCSB-2 (14-15)	Total/NA	Solid	Moisture	
480-46783-19	WCSB-1 (1-2)	Total/NA	Solid	Moisture	
480-46783-20	WCSB-1 (2.5-3)	Total/NA	Solid	Moisture	
480-46783-20 MS	WCSB-1 (2.5-3) MS	Total/NA	Solid	Moisture	
480-46783-20 MSD	WCSB-1 (2.5-3) MSD	Total/NA	Solid	Moisture	
480-46783-21	WCSB-1 (7-8)	Total/NA	Solid	Moisture	
480-46783-22	WCSB-3 (5-6)	Total/NA	Solid	Moisture	
480-46783-23	WCSB-3 (7-8)	Total/NA	Solid	Moisture	
480-46783-24	WCSB-9 (1-2)	Total/NA	Solid	Moisture	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

General Chemistry (Continued)

Analysis Batch: 141727 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-46783-25	WCSB-9 (2.5-3)	Total/NA	Solid	Moisture	
480-46783-27	WCSB-10 (2.5-3)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-11 (1-2)

Date Collected: 09/25/13 09:15

Date Received: 09/28/13 01:00

Lab Sample ID: 480-46783-1

Matrix: Solid

Percent Solids: 97.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142297	10/02/13 11:15	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	142288	10/02/13 17:37	CDC	TAL BUF
Total/NA	Analysis	MAVPH		1	142439	10/03/13 11:50	CMD	TAL BUF
Total/NA	Prep	5035			142077	10/01/13 12:20	CMD	TAL BUF
Total/NA	Analysis	MA VPH		1	143179	10/07/13 11:24	GSR	TAL BUF
Total/NA	Prep	3546			141819	09/30/13 08:34	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		10	142699	10/04/13 08:20	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		10	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-11 (2.5-3)

Date Collected: 09/25/13 09:20

Date Received: 09/28/13 01:00

Lab Sample ID: 480-46783-2

Matrix: Solid

Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			103651	10/01/13 10:09	KEC	TAL CAN
Total/NA	Analysis	8082		10	104246	10/04/13 14:36	HMB	TAL CAN
Total/NA	Prep	7471A			141828	09/30/13 10:40	JRK	TAL BUF
Total/NA	Analysis	7471A		5	141897	09/30/13 13:50	JRK	TAL BUF
Total/NA	Prep	3050B			141839	09/30/13 14:10	NMD2	TAL BUF
Total/NA	Analysis	6010		1	142236	10/01/13 19:58	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-7 (2.5-3)

Date Collected: 09/25/13 10:45

Date Received: 09/28/13 01:00

Lab Sample ID: 480-46783-3

Matrix: Solid

Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Analysis	8082		1	104275	10/04/13 16:36	HMB	TAL CAN
Total/NA	Prep	7471A			141828	09/30/13 10:40	JRK	TAL BUF
Total/NA	Analysis	7471A		10	141897	09/30/13 13:52	JRK	TAL BUF
Total/NA	Prep	3050B			141839	09/30/13 14:10	NMD2	TAL BUF
Total/NA	Analysis	6010		1	142236	10/01/13 20:01	AMH	TAL BUF
Total/NA	Analysis	6010		5	142509	10/02/13 22:52	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-7 (4-5)

Lab Sample ID: 480-46783-4

Date Collected: 09/25/13 10:55

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142297	10/02/13 11:15	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	142288	10/02/13 18:03	CDC	TAL BUF
Total/NA	Analysis	MAVPH		1	142133	10/02/13 03:25	CMD	TAL BUF
Total/NA	Prep	5035			142077	10/01/13 12:20	CMD	TAL BUF
Total/NA	Analysis	MA VPH		1	143179	10/07/13 11:24	GSR	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 14:21	DGB	TAL BUF
Total/NA	Prep	3546			141819	09/30/13 08:34	DLE	TAL BUF
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-7 (7.5-8)

Lab Sample ID: 480-46783-5

Date Collected: 09/25/13 11:10

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 65.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142057	10/01/13 11:37	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	142036	10/01/13 18:30	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-8 (2-2.5)

Lab Sample ID: 480-46783-6

Date Collected: 09/25/13 12:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142564	10/03/13 12:44	LCH	TAL BUF
Total/NA	Analysis	8260C		1	142492	10/03/13 20:13	LCH	TAL BUF
Total/NA	Prep	5035	DL		142564	10/03/13 12:44	LCH	TAL BUF
Total/NA	Analysis	8260C	DL	8	142727	10/04/13 17:02	RAL	TAL BUF
Total/NA	Prep	5035			142077	10/01/13 12:20	CMD	TAL BUF
Total/NA	Analysis	MAVPH		50	142133	10/02/13 04:03	CMD	TAL BUF
Total/NA	Analysis	MA VPH		50	143179	10/07/13 11:24	GSR	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 14:51	DGB	TAL BUF
Total/NA	Prep	3546			141819	09/30/13 08:34	DLE	TAL BUF
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-8 (2.5-3)

Lab Sample ID: 480-46783-7

Date Collected: 09/25/13 12:20

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 71.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Analysis	8082		1	104275	10/04/13 16:51	HMB	TAL CAN
Total/NA	Prep	7471A			141828	09/30/13 10:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	141897	09/30/13 12:10	JRK	TAL BUF
Total/NA	Prep	3050B			141839	09/30/13 14:10	NMD2	TAL BUF
Total/NA	Analysis	6010		1	142236	10/01/13 20:03	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-8 (7-8)

Lab Sample ID: 480-46783-8

Date Collected: 09/25/13 12:30

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 68.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142057	10/01/13 11:37	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	142036	10/01/13 19:21	CDC	TAL BUF
Total/NA	Prep	5035			142077	10/01/13 12:20	CMD	TAL BUF
Total/NA	Analysis	MAVPH		1	142439	10/03/13 12:28	CMD	TAL BUF
Total/NA	Analysis	MA VPH		1	143179	10/07/13 11:24	GSR	TAL BUF
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Analysis	8082		1	104106	10/03/13 21:23	HMB	TAL CAN
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Prep	3546			141819	09/30/13 08:34	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 15:20	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-6 (2.5-3)

Lab Sample ID: 480-46783-9

Date Collected: 09/25/13 14:00

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 96.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	104379	10/06/13 16:32	HMB	TAL CAN
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Prep	7471A			141828	09/30/13 10:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	141897	09/30/13 12:12	JRK	TAL BUF
Total/NA	Prep	3050B			141839	09/30/13 14:10	NMD2	TAL BUF
Total/NA	Analysis	6010		1	142236	10/01/13 20:05	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-6 (4-5)

Lab Sample ID: 480-46783-10

Date Collected: 09/25/13 14:05

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142057	10/01/13 11:37	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	142036	10/01/13 19:47	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-6 (8-9)

Lab Sample ID: 480-46783-11

Date Collected: 09/25/13 14:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 78.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142057	10/01/13 11:37	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	142036	10/01/13 20:12	CDC	TAL BUF
Total/NA	Prep	5035			142077	10/01/13 12:20	CMD	TAL BUF
Total/NA	Analysis	MAVPH		1	142439	10/03/13 13:37	CMD	TAL BUF
Total/NA	Analysis	MA VPH		1	143179	10/07/13 11:24	GSR	TAL BUF
Total/NA	Prep	3546			141819	09/30/13 14:30	DLE	TAL BUF
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 15:50	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-5 (0.5-1.5)

Lab Sample ID: 480-46783-12

Date Collected: 09/25/13 15:15

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142564	10/03/13 12:44	LCH	TAL BUF
Total/NA	Analysis	8260C		10	142492	10/03/13 20:38	LCH	TAL BUF
Total/NA	Prep	5035	DL		142564	10/03/13 12:44	LCH	TAL BUF
Total/NA	Analysis	8260C	DL	50	142727	10/04/13 17:27	RAL	TAL BUF
Total/NA	Analysis	8082		10000	104106	10/03/13 21:52	HMB	TAL CAN
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Prep	3546			141819	09/30/13 14:30	DLE	TAL BUF
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 16:20	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-5 (5-6)

Lab Sample ID: 480-46783-13

Date Collected: 09/25/13 15:25

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 73.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142564	10/03/13 12:44	LCH	TAL BUF
Total/NA	Analysis	8260C		10	142492	10/03/13 21:03	LCH	TAL BUF
Total/NA	Prep	5035	DL		142564	10/03/13 12:44	LCH	TAL BUF
Total/NA	Analysis	8260C	DL	40	142727	10/04/13 17:53	RAL	TAL BUF
Total/NA	Prep	5035			142077	10/01/13 12:20	CMD	TAL BUF
Total/NA	Analysis	MAVPH		100	142133	10/02/13 05:59	CMD	TAL BUF
Total/NA	Analysis	MA VPH		100	143179	10/07/13 11:24	GSR	TAL BUF
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Prep	3546			141819	09/30/13 14:30	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 16:49	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-5 (2.5-3)

Lab Sample ID: 480-46783-14

Date Collected: 09/25/13 15:30

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 84.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Analysis	8082		500	104275	10/04/13 17:06	HMB	TAL CAN
Total/NA	Prep	7471A			141828	09/30/13 10:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	141897	09/30/13 12:14	JRK	TAL BUF
Total/NA	Prep	3050B			141839	09/30/13 14:10	NMD2	TAL BUF
Total/NA	Analysis	6010		1	142236	10/01/13 20:08	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: TB-09252013

Lab Sample ID: 480-46783-15

Date Collected: 09/25/13 12:00

Matrix: Solid

Date Received: 09/28/13 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142297	10/02/13 11:15	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	142288	10/02/13 18:28	CDC	TAL BUF

Client Sample ID: WCSB-4 (2.5-3)

Lab Sample ID: 480-46783-16

Date Collected: 09/26/13 07:45

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 78.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142564	10/03/13 12:52	LCH	TAL BUF
Total/NA	Analysis	8260C		1	142727	10/04/13 18:18	RAL	TAL BUF
Total/NA	Prep	5035			142077	10/01/13 12:20	CMD	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-4 (2.5-3)

Lab Sample ID: 480-46783-16

Date Collected: 09/26/13 07:45

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 78.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	MAVPH		10	142270	10/02/13 17:34	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143179	10/07/13 11:24	GSR	TAL BUF
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Analysis	8082		1	104106	10/03/13 22:22	HMB	TAL CAN
Total/NA	Prep	3546			141819	09/30/13 14:30	DLE	TAL BUF
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 17:48	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Prep	7471A			141828	09/30/13 10:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	141897	09/30/13 12:15	JRK	TAL BUF
Total/NA	Prep	3050B			141839	09/30/13 14:10	NMD2	TAL BUF
Total/NA	Analysis	6010		1	142236	10/01/13 20:10	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-4 (6-7)

Lab Sample ID: 480-46783-17

Date Collected: 09/26/13 07:50

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 68.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142057	10/01/13 11:37	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	142036	10/01/13 22:20	CDC	TAL BUF
Total/NA	Analysis	8082		1	104106	10/03/13 22:37	HMB	TAL CAN
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Prep	3546			141819	09/30/13 14:30	DLE	TAL BUF
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 18:18	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-2 (14-15)

Lab Sample ID: 480-46783-18

Date Collected: 09/26/13 09:25

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 76.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142564	10/03/13 12:52	LCH	TAL BUF
Total/NA	Analysis	8260C		1	142727	10/04/13 18:43	RAL	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-1 (1-2)

Lab Sample ID: 480-46783-19

Date Collected: 09/26/13 10:40

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142297	10/02/13 11:15	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	142288	10/02/13 18:53	CDC	TAL BUF
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Analysis	8082		1	104106	10/03/13 23:21	HMB	TAL CAN
Total/NA	Prep	3546			141819	09/30/13 14:30	DLE	TAL BUF
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 18:48	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-1 (2.5-3)

Lab Sample ID: 480-46783-20

Date Collected: 09/26/13 10:45

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 69.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142564	10/03/13 12:52	LCH	TAL BUF
Total/NA	Analysis	8260C		1	142727	10/04/13 19:09	RAL	TAL BUF
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Analysis	8082		100	104106	10/03/13 23:36	HMB	TAL CAN
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Prep	3546			141819	09/30/13 14:30	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 19:17	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Prep	7471A			141828	09/30/13 10:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	141897	09/30/13 12:18	JRK	TAL BUF
Total/NA	Prep	3050B			141839	09/30/13 14:10	NMD2	TAL BUF
Total/NA	Analysis	6010		1	142236	10/01/13 20:12	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-1 (7-8)

Lab Sample ID: 480-46783-21

Date Collected: 09/26/13 10:55

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 74.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142297	10/02/13 11:15	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	142288	10/02/13 19:19	CDC	TAL BUF
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Analysis	8082		1	104106	10/03/13 23:51	HMB	TAL CAN
Total/NA	Prep	3546			141819	09/30/13 14:30	DLE	TAL BUF
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 19:47	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/07/13 10:55	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-3 (5-6)

Lab Sample ID: 480-46783-22

Date Collected: 09/26/13 12:00

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			143065	10/06/13 23:23	CDC	TAL BUF
Total/NA	Analysis	8260C		1	143062	10/07/13 02:48	PJQ	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-3 (7-8)

Lab Sample ID: 480-46783-23

Date Collected: 09/26/13 11:55

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 72.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			142077	10/01/13 12:20	CMD	TAL BUF
Total/NA	Analysis	MAVPH		1	142270	10/02/13 18:50	CMD	TAL BUF
Total/NA	Analysis	MA VPH		1	143179	10/07/13 11:24	GSR	TAL BUF
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Analysis	8082		1	104106	10/04/13 00:06	HMB	TAL CAN
Total/NA	Prep	3546			141819	09/30/13 14:30	DLE	TAL BUF
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 20:16	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-9 (1-2)

Lab Sample ID: 480-46783-24

Date Collected: 09/26/13 13:20

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			141819	09/30/13 14:30	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142271	10/02/13 20:46	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			141975	10/01/13 06:47	DLE	TAL BUF
Total/NA	Analysis	MA-EPH		1	142792	10/04/13 10:18	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-9 (2.5-3)

Lab Sample ID: 480-46783-25

Date Collected: 09/26/13 13:25

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	104106	10/04/13 00:21	HMB	TAL CAN
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Prep	7471A			141828	09/30/13 10:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	141897	09/30/13 12:29	JRK	TAL BUF
Total/NA	Prep	3050B			141839	09/30/13 14:10	NMD2	TAL BUF
Total/NA	Analysis	6010		1	142236	10/01/13 20:29	AMH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-46783-1

Client Sample ID: WCSB-9 (2.5-3)

Lab Sample ID: 480-46783-25

Date Collected: 09/26/13 13:25

Matrix: Solid

Date Received: 09/28/13 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Client Sample ID: WCSB-909 (2.5-3)

Lab Sample ID: 480-46783-26

Date Collected: 09/26/13 13:25

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	104106	10/04/13 00:36	HMB	TAL CAN
Total/NA	Prep	3540C			103632	10/01/13 09:24	KEC	TAL CAN
Total/NA	Analysis	Moisture		1	104009	10/03/13 14:38	TPH	TAL CAN

Client Sample ID: WCSB-10 (2.5-3)

Lab Sample ID: 480-46783-27

Date Collected: 09/26/13 14:05

Matrix: Solid

Date Received: 09/28/13 01:00

Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			141828	09/30/13 10:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	141897	09/30/13 12:31	JRK	TAL BUF
Total/NA	Prep	3050B			141839	09/30/13 14:10	NMD2	TAL BUF
Total/NA	Analysis	6010		1	142236	10/01/13 20:32	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	141727	09/28/13 11:40	GTG	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13 *
California	NELAP	9	1169CA	09-30-13 *
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13
Wisconsin	State Program	5	998310390	08-31-14

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *
USDA	Federal		P330-11-00328	08-26-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Laboratory: TestAmerica Canton (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-14

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
MA VPH	Massachusetts - Volatile Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
MAVPH	Massachusetts - Volatile Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL CAN
MA-EPH	Massachusetts - Extractable Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-46783-1

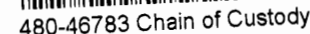
Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-46783-1	WCSB-11 (1-2)	Solid	09/25/13 09:15	09/28/13 01:00
480-46783-2	WCSB-11 (2.5-3)	Solid	09/25/13 09:20	09/28/13 01:00
480-46783-3	WCSB-7 (2.5-3)	Solid	09/25/13 10:45	09/28/13 01:00
480-46783-4	WCSB-7 (4-5)	Solid	09/25/13 10:55	09/28/13 01:00
480-46783-5	WCSB-7 (7.5-8)	Solid	09/25/13 11:10	09/28/13 01:00
480-46783-6	WCSB-8 (2-2.5)	Solid	09/25/13 12:15	09/28/13 01:00
480-46783-7	WCSB-8 (2.5-3)	Solid	09/25/13 12:20	09/28/13 01:00
480-46783-8	WCSB-8 (7-8)	Solid	09/25/13 12:30	09/28/13 01:00
480-46783-9	WCSB-6 (2.5-3)	Solid	09/25/13 14:00	09/28/13 01:00
480-46783-10	WCSB-6 (4-5)	Solid	09/25/13 14:05	09/28/13 01:00
480-46783-11	WCSB-6 (8-9)	Solid	09/25/13 14:15	09/28/13 01:00
480-46783-12	WCSB-5 (0.5-1.5)	Solid	09/25/13 15:15	09/28/13 01:00
480-46783-13	WCSB-5 (5-6)	Solid	09/25/13 15:25	09/28/13 01:00
480-46783-14	WCSB-5 (2.5-3)	Solid	09/25/13 15:30	09/28/13 01:00
480-46783-15	TB-09252013	Solid	09/25/13 12:00	09/28/13 01:00
480-46783-16	WCSB-4 (2.5-3)	Solid	09/26/13 07:45	09/28/13 01:00
480-46783-17	WCSB-4 (6-7)	Solid	09/26/13 07:50	09/28/13 01:00
480-46783-18	WCSB-2 (14-15)	Solid	09/26/13 09:25	09/28/13 01:00
480-46783-19	WCSB-1 (1-2)	Solid	09/26/13 10:40	09/28/13 01:00
480-46783-20	WCSB-1 (2.5-3)	Solid	09/26/13 10:45	09/28/13 01:00
480-46783-21	WCSB-1 (7-8)	Solid	09/26/13 10:55	09/28/13 01:00
480-46783-22	WCSB-3 (5-6)	Solid	09/26/13 12:00	09/28/13 01:00
480-46783-23	WCSB-3 (7-8)	Solid	09/26/13 11:55	09/28/13 01:00
480-46783-24	WCSB-9 (1-2)	Solid	09/26/13 13:20	09/28/13 01:00
480-46783-25	WCSB-9 (2.5-3)	Solid	09/26/13 13:25	09/28/13 01:00
480-46783-26	WCSB-909 (2.5-3)	Solid	09/26/13 13:25	09/28/13 01:00
480-46783-27	WCSB-10 (2.5-3)	Solid	09/26/13 14:05	09/28/13 01:00

TAL-4124 (1007)

Client

Drinking Water? Yes ☐ No ☒

THE LEADER IN

[illegible]

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal

☐ *Return To Client*☒ Disposal By Lab☐ *Archive For*

Months _____

Months longer than 1 month)

(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days☒ Other Standard

QC Requirements (Specify)

(iv) MCP CAM methods required; report to Gw-1/S-1 standards
GIS Key and Excel with EDD

1. Relinquished By

Date _____

Time

1. Received B

Date _____

Time

2. Relinquished By

Date / /

Time

2. Received By

Date _____

Time

3. Relinquished By

Date _____

Time

3. Received B

Date _____

Time

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

2.5. 28 #

Page 121 of 124

2/3/2014

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client Woodward & Curran			Project Manager Andrea Hevey			Date 9/26/13		Chain of Custody Number 238341	
Address 95 Cedar St. Ste 100			Telephone Number (Area Code)/Fax Number 401-275-1007, ahevey@woodwardcurran.com			Lab Number		Page 3 of 3	
City Providence	State RI	Zip Code 02903	Site Contact Andrea Hevey		Lab Contact Becky Mason		Analysis (Attach list if more space is needed)		
Project Name and Location (State) Quincy - Intervale, Quincy, MA			Carrier/Waybill Number			<div style="display: flex; justify-content: space-between;"> <div> PCB (8082 Soxhlet) NCPH Metals VOC (8260) VPH (8260) EPH (8260) </div> <div> </div> </div>			
Contract/Purchase Order/Quote No.									

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Unpres.	Preservatives																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																</
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Possible Hazard Identification			Sample Disposal			(A fee may be assessed if samples are retained longer than 1 month)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input checked="" type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months	
Turn Around Time Required			QC Requirements (Specify)					
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input checked="" type="checkbox"/> Other Standard	MEPCAM methods required; report to GW-1/S-1 Standards GISKEY and excel with EDD		
1. Relinquished By			Date 9/27/13 Time 935			1. Received By TA Date 9/27/13 Time 935		
2. Relinquished By			Date 9/27/13 Time 1600			2. Received By TA Date 9-28-13 Time 0100		
3. Relinquished By			Date			3. Received By		

Comments

2.3 2.4-H!

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-46783-1

Login Number: 46783

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-50846-1

Client Project/Site: Quincy Inervale

For:

Woodard & Curran Inc

40 Shattuck Road

Suite 110

Andover, Massachusetts 01810

Attn: Mr. Jarrod Yoder



Authorized for release by:

12/12/2013 11:24:53 AM

Becky Mason, Project Manager II

(413)572-4000

becky.mason@testamericainc.com

LINKS

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results through

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
F	MS/MSD Recovery and/or RPD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Job ID: 480-50846-1

Laboratory: TestAmerica Buffalo

Narrative

Receipt

The samples were received on 11/26/2013 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.3° C and 3.6° C.

The following samples were preserved via freezing by the client on 11/22/2013 at 20:00: TB-11222013 (1) (480-50846-20), WCSS-55 (0-0.25) (480-50846-14), WCSS-56 (0-0.25) (480-50846-13), WCSS-57 (0-0.25) (480-50846-15). This is within the 48 hour timeframe required by the method.

GC/MS VOA

Method 8260C: The continuing calibration verification (CCV) for Chloroethane and Dichlorodifluoromethane associated with batch 154424 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.

Method 8260C: The laboratory control sample (LCS) for batch 154424 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample.

With the exception of diluted samples and adjustments made for % solids or insufficient sample mass, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-Dibromo-3-Chloropropane, Naphthalene, & Tetrahydrofuran.

No other analytical or quality issues were noted.

GC Semi VOA

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: WCSS-47 (0-0.25) (480-50846-2), WCSS-49 (0-0.25) (480-50846-9), WCSS-52 (0-0.25) (480-50846-7), WCSS-53 (0-0.25) (480-50846-6), WCSS-54 (0-0.25) (480-50846-5), WCSS-57 (0-0.25) (480-50846-15), WCSS-58 (0-0.25) (480-50846-11), WCSS-59 (0-0.25) (480-50846-4), WCSS-60 (0-0.25) (480-50846-3), WCSS-61 (0-0.25) (480-50846-1), WCSS-62 (0-0.25) (480-50846-16), WCSS-63 (0-0.25) (480-50846-17), WCSS-958 (0-0.25) (480-50846-12), EXS221025 (480-50852-5), EXS221025 MS (480-50852-5 MS), EXS221025 MSD (480-50852-5 MSD), WCSS-51 (0-0.25) (480-50846-8). Lot # S65830

Method 8082: The following samples appear to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: WCSS-47 (0-0.25) (480-50846-2), WCSS-49 (0-0.25) (480-50846-9), WCSS-53 (0-0.25) (480-50846-6), WCSS-58 (0-0.25) (480-50846-11), WCSS-59 (0-0.25) (480-50846-4), WCSS-60 (0-0.25) (480-50846-3), WCSS-958 (0-0.25) (480-50846-12). The samples have been quantified and reported as a mixture. The best possible match was reported. Due to the poor match with the Aroclor standards, there is increased qualitative and quantitative uncertainty associated with this result.

Method 8082: One surrogate failed low on the confirmation column. Both surrogates on the primary column passed. No corrective action is required.

No other analytical or quality issues were noted.

Metals

Method 6010: The Method Blank for batch 480-154522 contained total zinc above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples WCSS-49 (0-0.25) (480-50846-9), WCSS-50 (0-0.25) (480-50846-10), WCSS-51 (0-0.25) (480-50846-8), WCSS-52 (0-0.25) (480-50846-7), WCSS-53 (0-0.25) (480-50846-6), WCSS-54 (0-0.25) (480-50846-5), WCSS-57 (0-0.25) (480-50846-15), WCSS-58 (0-0.25) (480-50846-11), WCSS-59 (0-0.25) (480-50846-4), WCSS-60 (0-0.25) (480-50846-3), WCSS-61 (0-0.25) (480-50846-1), WCSS-62 (0-0.25) (480-50846-16), WCSS-63 (0-0.25) (480-50846-17), WCSS-72 (0-0.25) (480-50846-18) was not performed.

Method 6010: The ICSA ((ICSA 480-155331/10)) exhibited results outside the project established control limits for total antimony. However, the results were within TestAmerica's standard quality control limits, therefore no corrective action was necessary.

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Job ID: 480-50846-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method 6010: The Matrix Spike (WCSS-58 (0-0.25) MS (480-50846-11 MS)) recoveries for total lead and zinc in batch 480-154522 were outside control limits. Matrix interference is suspected. The associated Laboratory Control Sample (LCS) recovery met acceptance criteria, therefore no corrective action was necessary.

Method 7471A: The following samples were diluted to bring the concentration of the target analyte total mercury within the calibration range: WCSS-49 (0-0.25) (480-50846-9), WCSS-51 (0-0.25) (480-50846-8), WCSS-62 (0-0.25) (480-50846-16). Elevated reporting limits (RLs) are provided.

Method 7471A: The Matrix Spike/ Matrix Spike Duplicate (MS/MSD) recoveries for total mercury in batches 154828 and 154829 were outside control limits. The associated Laboratory Control Sample (LCS) recovery met acceptance criteria, therefore no corrective action was necessary.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

MassDEP Analytical Protocol Certification Form					
Laboratory Name: TestAmerica Buffalo		Project #: 480-50846-1			
Project Location: Quincy		RTN:			
This form provides certifications for the data set for the following Laboratory Sample ID Number(s): 480-50846-1[1-20]					
Matrices: <input type="checkbox"/> Groundwater/Surface Water <input checked="" type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
CAM Protocols (check all that apply below):					
8260 VOC CAM II A <input checked="" type="checkbox"/>	7470/7471 Hg CAM III B <input checked="" type="checkbox"/>	Mass DEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input type="checkbox"/>	Mass DEP EPH CAM IV B <input checked="" type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input checked="" type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input checked="" type="checkbox"/>	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Responses to Questions G, H and I below are required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
¹ All negative responses must be addressed in an attached laboratory narrative.					
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.					
Signature:		Position: <u>Project Manager</u>			
Printed Name: <u>Becky Mason</u>		Date: <u>12/12/13 11:22</u>			
This form has been electronically signed and approved					

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-61 (0-0.25)

Lab Sample ID: 480-50846-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.0378		0.0344	0.0177	mg/Kg	1	☼	8082	Total/NA
Arsenic	2.92		0.955	0.382	mg/Kg	1	☼	6010	Total/NA
Barium	19.9		0.478	0.105	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.390		0.191	0.0267	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.150	J	0.191	0.0287	mg/Kg	1	☼	6010	Total/NA
Chromium	6.53		0.478	0.191	mg/Kg	1	☼	6010	Total/NA
Nickel	6.97		0.955	0.220	mg/Kg	1	☼	6010	Total/NA
Vanadium	17.3		0.478	0.105	mg/Kg	1	☼	6010	Total/NA
Zinc	47.3	B	2.39	0.146	mg/Kg	1	☼	6010	Total/NA
Lead	24.3		0.478	0.229	mg/Kg	1	☼	6010	Total/NA
Selenium	0.388	J	0.478	0.382	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0346	J	0.105	0.00852	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: WCSS-47 (0-0.25)

Lab Sample ID: 480-50846-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.404		0.181	0.0933	mg/Kg	5	☼	8082	Total/NA

Client Sample ID: WCSS-60 (0-0.25)

Lab Sample ID: 480-50846-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.430		0.174	0.0897	mg/Kg	5	☼	8082	Total/NA
Arsenic	5.87		1.03	0.411	mg/Kg	1	☼	6010	Total/NA
Barium	47.0		0.514	0.113	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.363		0.205	0.0288	mg/Kg	1	☼	6010	Total/NA
Cadmium	1.82		0.205	0.0308	mg/Kg	1	☼	6010	Total/NA
Chromium	26.2		0.514	0.205	mg/Kg	1	☼	6010	Total/NA
Nickel	33.7		1.03	0.236	mg/Kg	1	☼	6010	Total/NA
Vanadium	19.9		0.514	0.113	mg/Kg	1	☼	6010	Total/NA
Zinc	338	B	2.57	0.157	mg/Kg	1	☼	6010	Total/NA
Lead	200		0.514	0.246	mg/Kg	1	☼	6010	Total/NA
Selenium	0.561		0.514	0.411	mg/Kg	1	☼	6010	Total/NA
Antimony	0.683	^	0.514	0.411	mg/Kg	1	☼	6010	Total/NA
Mercury	0.104		0.100	0.00813	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: WCSS-59 (0-0.25)

Lab Sample ID: 480-50846-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.125		0.0356	0.0183	mg/Kg	1	☼	8082	Total/NA
Arsenic	3.62		1.14	0.454	mg/Kg	1	☼	6010	Total/NA
Barium	29.2		0.568	0.125	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.293		0.227	0.0318	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.677		0.227	0.0341	mg/Kg	1	☼	6010	Total/NA
Chromium	21.5		0.568	0.227	mg/Kg	1	☼	6010	Total/NA
Nickel	29.4		1.14	0.261	mg/Kg	1	☼	6010	Total/NA
Vanadium	23.1		0.568	0.125	mg/Kg	1	☼	6010	Total/NA
Zinc	116	B	2.84	0.174	mg/Kg	1	☼	6010	Total/NA
Lead	100		0.568	0.272	mg/Kg	1	☼	6010	Total/NA
Selenium	1.19		0.568	0.454	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0760	J	0.111	0.00896	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-54 (0-0.25)

Lab Sample ID: 480-50846-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1260	0.376		0.172	0.0888	mg/Kg	5		✱	8082	Total/NA
Arsenic	3.19		0.977	0.391	mg/Kg	1		✱	6010	Total/NA
Barium	32.6		0.489	0.107	mg/Kg	1		✱	6010	Total/NA
Beryllium	0.358		0.195	0.0274	mg/Kg	1		✱	6010	Total/NA
Cadmium	0.690		0.195	0.0293	mg/Kg	1		✱	6010	Total/NA
Chromium	34.2		0.489	0.195	mg/Kg	1		✱	6010	Total/NA
Nickel	28.4		0.977	0.225	mg/Kg	1		✱	6010	Total/NA
Vanadium	23.9		0.489	0.107	mg/Kg	1		✱	6010	Total/NA
Zinc	131	B	2.44	0.150	mg/Kg	1		✱	6010	Total/NA
Lead	106		0.489	0.235	mg/Kg	1		✱	6010	Total/NA
Selenium	0.783		0.489	0.391	mg/Kg	1		✱	6010	Total/NA
Mercury	0.111		0.0936	0.00758	mg/Kg	1		✱	7471A	Total/NA

Client Sample ID: WCSS-53 (0-0.25)

Lab Sample ID: 480-50846-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1260	0.381		0.172	0.0888	mg/Kg	5		✱	8082	Total/NA
Arsenic	4.89		1.10	0.440	mg/Kg	1		✱	6010	Total/NA
Barium	39.5		0.550	0.121	mg/Kg	1		✱	6010	Total/NA
Beryllium	0.287		0.220	0.0308	mg/Kg	1		✱	6010	Total/NA
Cadmium	1.32		0.220	0.0330	mg/Kg	1		✱	6010	Total/NA
Chromium	55.3		0.550	0.220	mg/Kg	1		✱	6010	Total/NA
Nickel	47.4		1.10	0.253	mg/Kg	1		✱	6010	Total/NA
Vanadium	24.1		0.550	0.121	mg/Kg	1		✱	6010	Total/NA
Zinc	239	B	2.75	0.168	mg/Kg	1		✱	6010	Total/NA
Lead	161		0.550	0.264	mg/Kg	1		✱	6010	Total/NA
Selenium	0.914		0.550	0.440	mg/Kg	1		✱	6010	Total/NA
Antimony	0.573	^	0.550	0.440	mg/Kg	1		✱	6010	Total/NA
Mercury	0.172		0.0985	0.00798	mg/Kg	1		✱	7471A	Total/NA

Client Sample ID: WCSS-52 (0-0.25)

Lab Sample ID: 480-50846-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1260	1.88		0.376	0.194	mg/Kg	10		✱	8082	Total/NA
Arsenic	3.52		1.24	0.497	mg/Kg	1		✱	6010	Total/NA
Barium	249		0.621	0.137	mg/Kg	1		✱	6010	Total/NA
Beryllium	0.271		0.248	0.0348	mg/Kg	1		✱	6010	Total/NA
Cadmium	3.51		0.248	0.0373	mg/Kg	1		✱	6010	Total/NA
Chromium	29.1		0.621	0.248	mg/Kg	1		✱	6010	Total/NA
Nickel	32.0		1.24	0.286	mg/Kg	1		✱	6010	Total/NA
Vanadium	17.9		0.621	0.137	mg/Kg	1		✱	6010	Total/NA
Zinc	722	B	3.10	0.190	mg/Kg	1		✱	6010	Total/NA
Lead	338		0.621	0.298	mg/Kg	1		✱	6010	Total/NA
Antimony	1.76	^	0.621	0.497	mg/Kg	1		✱	6010	Total/NA
Mercury	0.830		0.111	0.00898	mg/Kg	1		✱	7471A	Total/NA

Client Sample ID: WCSS-51 (0-0.25)

Lab Sample ID: 480-50846-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1260	3.15		0.739	0.381	mg/Kg	20		✱	8082	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-51 (0-0.25) (Continued)

Lab Sample ID: 480-50846-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.47		1.16	0.463	mg/Kg	1	☼	6010	Total/NA
Barium	78.1		0.579	0.127	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.758		0.231	0.0324	mg/Kg	1	☼	6010	Total/NA
Cadmium	5.51		0.231	0.0347	mg/Kg	1	☼	6010	Total/NA
Chromium	29.9		0.579	0.231	mg/Kg	1	☼	6010	Total/NA
Nickel	32.5		1.16	0.266	mg/Kg	1	☼	6010	Total/NA
Vanadium	16.2		0.579	0.127	mg/Kg	1	☼	6010	Total/NA
Zinc	613	B	2.89	0.177	mg/Kg	1	☼	6010	Total/NA
Lead	617		0.579	0.278	mg/Kg	1	☼	6010	Total/NA
Selenium	0.520	J	0.579	0.463	mg/Kg	1	☼	6010	Total/NA
Antimony	2.60	^	0.579	0.463	mg/Kg	1	☼	6010	Total/NA
Mercury	1.76		1.07	0.0865	mg/Kg	10	☼	7471A	Total/NA

Client Sample ID: WCSS-49 (0-0.25)

Lab Sample ID: 480-50846-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	1.55		0.383	0.198	mg/Kg	10	☼	8082	Total/NA
Silver	2.63		0.552	0.221	mg/Kg	1	☼	6010	Total/NA
Arsenic	9.11		1.10	0.441	mg/Kg	1	☼	6010	Total/NA
Barium	392		0.552	0.121	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.430		0.221	0.0309	mg/Kg	1	☼	6010	Total/NA
Cadmium	6.10		0.221	0.0331	mg/Kg	1	☼	6010	Total/NA
Chromium	44.1		0.552	0.221	mg/Kg	1	☼	6010	Total/NA
Nickel	50.8		1.10	0.254	mg/Kg	1	☼	6010	Total/NA
Vanadium	23.1		0.552	0.121	mg/Kg	1	☼	6010	Total/NA
Zinc	1500	B	2.76	0.169	mg/Kg	1	☼	6010	Total/NA
Lead	1340		0.552	0.265	mg/Kg	1	☼	6010	Total/NA
Selenium	1.08		0.552	0.441	mg/Kg	1	☼	6010	Total/NA
Antimony	16.4	^	0.552	0.441	mg/Kg	1	☼	6010	Total/NA
Mercury	8.79		2.29	0.185	mg/Kg	20	☼	7471A	Total/NA

Client Sample ID: WCSS-50 (0-0.25)

Lab Sample ID: 480-50846-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.32		1.13	0.451	mg/Kg	1	☼	6010	Total/NA
Barium	31.8		0.564	0.124	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.288		0.226	0.0316	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.524		0.226	0.0338	mg/Kg	1	☼	6010	Total/NA
Chromium	10.4		0.564	0.226	mg/Kg	1	☼	6010	Total/NA
Nickel	9.59		1.13	0.259	mg/Kg	1	☼	6010	Total/NA
Vanadium	23.8		0.564	0.124	mg/Kg	1	☼	6010	Total/NA
Zinc	103	B	2.82	0.173	mg/Kg	1	☼	6010	Total/NA
Lead	69.7		0.564	0.271	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0705	J	0.113	0.00912	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: WCSS-58 (0-0.25)

Lab Sample ID: 480-50846-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.305		0.180	0.0929	mg/Kg	5	☼	8082	Total/NA
Arsenic	3.42		0.986	0.394	mg/Kg	1	☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-58 (0-0.25) (Continued)

Lab Sample ID: 480-50846-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	49.1		0.493	0.108	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.277		0.197	0.0276	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.654		0.197	0.0296	mg/Kg	1	☼	6010	Total/NA
Chromium	25.4		0.493	0.197	mg/Kg	1	☼	6010	Total/NA
Nickel	23.7		0.986	0.227	mg/Kg	1	☼	6010	Total/NA
Vanadium	22.9		0.493	0.108	mg/Kg	1	☼	6010	Total/NA
Zinc	137	B	2.46	0.151	mg/Kg	1	☼	6010	Total/NA
Lead	121		0.493	0.237	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0807	J	0.0981	0.00794	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: WCSS-958 (0-0.25)

Lab Sample ID: 480-50846-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.254		0.182	0.0936	mg/Kg	5	☼	8082	Total/NA

Client Sample ID: WCSS-56 (0-0.25)

Lab Sample ID: 480-50846-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.00307	J	0.00390	0.000538	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.0130		0.00779	0.00131	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00510		0.00390	0.00102	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.0510		0.00390	0.00105	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: WCSS-55 (0-0.25)

Lab Sample ID: 480-50846-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.000905	J	0.00207	0.000285	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00368	J	0.00413	0.000694	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00148	J	0.00207	0.000540	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: WCSS-57 (0-0.25)

Lab Sample ID: 480-50846-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.00227	J	0.00268	0.000369	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00855		0.00535	0.000900	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00339		0.00268	0.000699	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.0381		0.00268	0.000405	mg/Kg	1	☼	8260C	Total/NA
PCB-1260	0.105		0.0376	0.0194	mg/Kg	1	☼	8082	Total/NA
Benzo[a]anthracene	0.839		0.528	0.0803	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]pyrene	1.38		0.528	0.0760	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	2.17		0.528	0.0750	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[k]fluoranthene	0.798		0.528	0.0771	mg/Kg	1	☼	MA-EPH	Total/NA
Chrysene	1.38		0.528	0.0940	mg/Kg	1	☼	MA-EPH	Total/NA
Fluoranthene	1.92		0.528	0.0929	mg/Kg	1	☼	MA-EPH	Total/NA
Phenanthrene	0.677		0.528	0.106	mg/Kg	1	☼	MA-EPH	Total/NA
Pyrene	1.76		0.528	0.0961	mg/Kg	1	☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	53.5		5.28	2.11	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	59.0		5.28	2.11	mg/Kg	1	☼	MA-EPH	Total/NA
Arsenic	2.38		1.07	0.430	mg/Kg	1	☼	6010	Total/NA
Barium	22.9		0.537	0.118	mg/Kg	1	☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-57 (0-0.25) (Continued)

Lab Sample ID: 480-50846-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.186	J	0.215	0.0301	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.343		0.215	0.0322	mg/Kg	1	☼	6010	Total/NA
Chromium	10.3		0.537	0.215	mg/Kg	1	☼	6010	Total/NA
Nickel	12.0		1.07	0.247	mg/Kg	1	☼	6010	Total/NA
Vanadium	27.9		0.537	0.118	mg/Kg	1	☼	6010	Total/NA
Zinc	79.6	B	2.68	0.164	mg/Kg	1	☼	6010	Total/NA
Lead	48.0		0.537	0.258	mg/Kg	1	☼	6010	Total/NA
Mercury	0.109	J	0.111	0.00901	mg/Kg	1	☼	7471A	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	42.6		5.70	5.70	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSS-62 (0-0.25)

Lab Sample ID: 480-50846-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	3.24		0.362	0.186	mg/Kg	10	☼	8082	Total/NA
Arsenic	10.2		1.21	0.484	mg/Kg	1	☼	6010	Total/NA
Barium	179		0.605	0.133	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.477		0.242	0.0339	mg/Kg	1	☼	6010	Total/NA
Cadmium	7.89		0.242	0.0363	mg/Kg	1	☼	6010	Total/NA
Chromium	17.9		0.605	0.242	mg/Kg	1	☼	6010	Total/NA
Nickel	25.7		1.21	0.278	mg/Kg	1	☼	6010	Total/NA
Vanadium	17.7		0.605	0.133	mg/Kg	1	☼	6010	Total/NA
Zinc	895	B	3.02	0.185	mg/Kg	1	☼	6010	Total/NA
Lead	662		0.605	0.290	mg/Kg	1	☼	6010	Total/NA
Selenium	0.904		0.605	0.484	mg/Kg	1	☼	6010	Total/NA
Antimony	5.10	^	0.605	0.484	mg/Kg	1	☼	6010	Total/NA
Mercury	1.43		0.559	0.0453	mg/Kg	5	☼	7471A	Total/NA

Client Sample ID: WCSS-63 (0-0.25)

Lab Sample ID: 480-50846-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	7.67		1.31	0.674	mg/Kg	20	☼	8082	Total/NA
Silver	1.54		1.07	0.429	mg/Kg	1	☼	6010	Total/NA
Arsenic	32.0		2.15	0.858	mg/Kg	1	☼	6010	Total/NA
Barium	317		1.07	0.236	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.433		0.429	0.0601	mg/Kg	1	☼	6010	Total/NA
Cadmium	12.4		0.429	0.0644	mg/Kg	1	☼	6010	Total/NA
Chromium	61.8		1.07	0.429	mg/Kg	1	☼	6010	Total/NA
Nickel	57.4		2.15	0.493	mg/Kg	1	☼	6010	Total/NA
Vanadium	31.3		1.07	0.236	mg/Kg	1	☼	6010	Total/NA
Zinc	4150	B	5.36	0.328	mg/Kg	1	☼	6010	Total/NA
Lead	2780		1.07	0.515	mg/Kg	1	☼	6010	Total/NA
Selenium	2.28		1.07	0.858	mg/Kg	1	☼	6010	Total/NA
Antimony	54.7	^	1.07	0.858	mg/Kg	1	☼	6010	Total/NA
Mercury	0.799		0.199	0.0161	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: WCSS-72(0-0.25)

Lab Sample ID: 480-50846-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.15		1.15	0.461	mg/Kg	1	☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-72(0-0.25) (Continued)

Lab Sample ID: 480-50846-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	29.0		0.576	0.127	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.195	J	0.230	0.0322	mg/Kg	1		☼	6010	Total/NA
Cadmium	0.315		0.230	0.0345	mg/Kg	1		☼	6010	Total/NA
Chromium	7.09		0.576	0.230	mg/Kg	1		☼	6010	Total/NA
Nickel	6.10		1.15	0.265	mg/Kg	1		☼	6010	Total/NA
Vanadium	9.24		0.576	0.127	mg/Kg	1		☼	6010	Total/NA
Zinc	50.8	B	2.88	0.176	mg/Kg	1		☼	6010	Total/NA
Lead	13.3		0.576	0.276	mg/Kg	1		☼	6010	Total/NA
Mercury	0.0164	J	0.111	0.00896	mg/Kg	1		☼	7471A	Total/NA

Client Sample ID: WCEB-57 (0-0.25)

Lab Sample ID: 480-50846-19

No Detections.

Client Sample ID: TB-11222013 (1)

Lab Sample ID: 480-50846-20

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-61 (0-0.25)

Lab Sample ID: 480-50846-1

Date Collected: 11/22/13 07:50

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 96.8

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0344		0.0344	0.0219	mg/Kg	☼	11/29/13 07:58	12/03/13 22:21	1
PCB-1221	<0.0344		0.0344	0.0167	mg/Kg	☼	11/29/13 07:58	12/03/13 22:21	1
PCB-1232	<0.0344		0.0344	0.0146	mg/Kg	☼	11/29/13 07:58	12/03/13 22:21	1
PCB-1242	<0.0344		0.0344	0.0135	mg/Kg	☼	11/29/13 07:58	12/03/13 22:21	1
PCB-1248	<0.0344		0.0344	0.0177	mg/Kg	☼	11/29/13 07:58	12/03/13 22:21	1
PCB-1254	<0.0344		0.0344	0.0177	mg/Kg	☼	11/29/13 07:58	12/03/13 22:21	1
PCB-1260	0.0378		0.0344	0.0177	mg/Kg	☼	11/29/13 07:58	12/03/13 22:21	1
PCB-1262	<0.0344		0.0344	0.0281	mg/Kg	☼	11/29/13 07:58	12/03/13 22:21	1
PCB-1268	<0.0344		0.0344	0.0146	mg/Kg	☼	11/29/13 07:58	12/03/13 22:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	77		30 - 150	11/29/13 07:58	12/03/13 22:21	1
Tetrachloro-m-xylene	73		30 - 150	11/29/13 07:58	12/03/13 22:21	1
DCB Decachlorobiphenyl	76		30 - 150	11/29/13 07:58	12/03/13 22:21	1
DCB Decachlorobiphenyl	65		30 - 150	11/29/13 07:58	12/03/13 22:21	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.478		0.478	0.191	mg/Kg	☼	11/26/13 10:00	12/01/13 00:41	1
Arsenic	2.92		0.955	0.382	mg/Kg	☼	11/26/13 10:00	12/02/13 16:49	1
Barium	19.9		0.478	0.105	mg/Kg	☼	11/26/13 10:00	12/01/13 00:41	1
Beryllium	0.390		0.191	0.0267	mg/Kg	☼	11/26/13 10:00	12/01/13 00:41	1
Cadmium	0.150	J	0.191	0.0287	mg/Kg	☼	11/26/13 10:00	12/01/13 00:41	1
Chromium	6.53		0.478	0.191	mg/Kg	☼	11/26/13 10:00	12/01/13 00:41	1
Nickel	6.97		0.955	0.220	mg/Kg	☼	11/26/13 10:00	12/01/13 00:41	1
Thallium	<0.955		0.955	0.287	mg/Kg	☼	11/26/13 10:00	12/02/13 16:49	1
Vanadium	17.3		0.478	0.105	mg/Kg	☼	11/26/13 10:00	12/01/13 00:41	1
Zinc	47.3	B	2.39	0.146	mg/Kg	☼	11/26/13 10:00	12/01/13 00:41	1
Lead	24.3		0.478	0.229	mg/Kg	☼	11/26/13 10:00	12/01/13 00:41	1
Selenium	0.388	J	0.478	0.382	mg/Kg	☼	11/26/13 10:00	12/02/13 16:49	1
Antimony	<0.478	^	0.478	0.382	mg/Kg	☼	11/26/13 10:00	12/02/13 16:49	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0346	J	0.105	0.00852	mg/Kg	☼	11/29/13 08:40	11/29/13 15:21	1

Client Sample ID: WCSS-47 (0-0.25)

Lab Sample ID: 480-50846-2

Date Collected: 11/22/13 08:00

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.181		0.181	0.115	mg/Kg	☼	11/29/13 07:58	12/03/13 22:36	5
PCB-1221	<0.181		0.181	0.0878	mg/Kg	☼	11/29/13 07:58	12/03/13 22:36	5
PCB-1232	<0.181		0.181	0.0769	mg/Kg	☼	11/29/13 07:58	12/03/13 22:36	5
PCB-1242	<0.181		0.181	0.0714	mg/Kg	☼	11/29/13 07:58	12/03/13 22:36	5
PCB-1248	<0.181		0.181	0.0933	mg/Kg	☼	11/29/13 07:58	12/03/13 22:36	5
PCB-1254	<0.181		0.181	0.0933	mg/Kg	☼	11/29/13 07:58	12/03/13 22:36	5
PCB-1260	0.404		0.181	0.0933	mg/Kg	☼	11/29/13 07:58	12/03/13 22:36	5
PCB-1262	<0.181		0.181	0.148	mg/Kg	☼	11/29/13 07:58	12/03/13 22:36	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-47 (0-0.25)

Lab Sample ID: 480-50846-2

Date Collected: 11/22/13 08:00

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	<0.181		0.181	0.0769	mg/Kg	☼	11/29/13 07:58	12/03/13 22:36	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	117		30 - 150				11/29/13 07:58	12/03/13 22:36	5
Tetrachloro-m-xylene	94		30 - 150				11/29/13 07:58	12/03/13 22:36	5
DCB Decachlorobiphenyl	297	X	30 - 150				11/29/13 07:58	12/03/13 22:36	5
DCB Decachlorobiphenyl	78		30 - 150				11/29/13 07:58	12/03/13 22:36	5

Client Sample ID: WCSS-60 (0-0.25)

Lab Sample ID: 480-50846-3

Date Collected: 11/22/13 08:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 95.5

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.174		0.174	0.111	mg/Kg	☼	11/29/13 07:58	12/03/13 22:52	5
PCB-1221	<0.174		0.174	0.0844	mg/Kg	☼	11/29/13 07:58	12/03/13 22:52	5
PCB-1232	<0.174		0.174	0.0739	mg/Kg	☼	11/29/13 07:58	12/03/13 22:52	5
PCB-1242	<0.174		0.174	0.0686	mg/Kg	☼	11/29/13 07:58	12/03/13 22:52	5
PCB-1248	<0.174		0.174	0.0897	mg/Kg	☼	11/29/13 07:58	12/03/13 22:52	5
PCB-1254	<0.174		0.174	0.0897	mg/Kg	☼	11/29/13 07:58	12/03/13 22:52	5
PCB-1260	0.430		0.174	0.0897	mg/Kg	☼	11/29/13 07:58	12/03/13 22:52	5
PCB-1262	<0.174		0.174	0.142	mg/Kg	☼	11/29/13 07:58	12/03/13 22:52	5
PCB-1268	<0.174		0.174	0.0739	mg/Kg	☼	11/29/13 07:58	12/03/13 22:52	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		30 - 150				11/29/13 07:58	12/03/13 22:52	5
Tetrachloro-m-xylene	83		30 - 150				11/29/13 07:58	12/03/13 22:52	5
DCB Decachlorobiphenyl	117		30 - 150				11/29/13 07:58	12/03/13 22:52	5
DCB Decachlorobiphenyl	77		30 - 150				11/29/13 07:58	12/03/13 22:52	5

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.514		0.514	0.205	mg/Kg	☼	11/26/13 10:00	12/01/13 00:44	1
Arsenic	5.87		1.03	0.411	mg/Kg	☼	11/26/13 10:00	12/02/13 17:03	1
Barium	47.0		0.514	0.113	mg/Kg	☼	11/26/13 10:00	12/01/13 00:44	1
Beryllium	0.363		0.205	0.0288	mg/Kg	☼	11/26/13 10:00	12/01/13 00:44	1
Cadmium	1.82		0.205	0.0308	mg/Kg	☼	11/26/13 10:00	12/01/13 00:44	1
Chromium	26.2		0.514	0.205	mg/Kg	☼	11/26/13 10:00	12/01/13 00:44	1
Nickel	33.7		1.03	0.236	mg/Kg	☼	11/26/13 10:00	12/01/13 00:44	1
Thallium	<1.03		1.03	0.308	mg/Kg	☼	11/26/13 10:00	12/02/13 17:03	1
Vanadium	19.9		0.514	0.113	mg/Kg	☼	11/26/13 10:00	12/01/13 00:44	1
Zinc	338	B	2.57	0.157	mg/Kg	☼	11/26/13 10:00	12/01/13 00:44	1
Lead	200		0.514	0.246	mg/Kg	☼	11/26/13 10:00	12/01/13 00:44	1
Selenium	0.561		0.514	0.411	mg/Kg	☼	11/26/13 10:00	12/02/13 17:03	1
Antimony	0.683	^	0.514	0.411	mg/Kg	☼	11/26/13 10:00	12/02/13 17:03	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.104		0.100	0.00813	mg/Kg	☼	11/29/13 08:40	11/29/13 15:22	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-59 (0-0.25)

Lab Sample ID: 480-50846-4

Date Collected: 11/22/13 08:25

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 93.5

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0356		0.0356	0.0227	mg/Kg	☼	11/29/13 07:58	12/03/13 23:08	1
PCB-1221	<0.0356		0.0356	0.0173	mg/Kg	☼	11/29/13 07:58	12/03/13 23:08	1
PCB-1232	<0.0356		0.0356	0.0151	mg/Kg	☼	11/29/13 07:58	12/03/13 23:08	1
PCB-1242	<0.0356		0.0356	0.0140	mg/Kg	☼	11/29/13 07:58	12/03/13 23:08	1
PCB-1248	<0.0356		0.0356	0.0183	mg/Kg	☼	11/29/13 07:58	12/03/13 23:08	1
PCB-1254	<0.0356		0.0356	0.0183	mg/Kg	☼	11/29/13 07:58	12/03/13 23:08	1
PCB-1260	0.125		0.0356	0.0183	mg/Kg	☼	11/29/13 07:58	12/03/13 23:08	1
PCB-1262	<0.0356		0.0356	0.0291	mg/Kg	☼	11/29/13 07:58	12/03/13 23:08	1
PCB-1268	<0.0356		0.0356	0.0151	mg/Kg	☼	11/29/13 07:58	12/03/13 23:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	33		30 - 150				11/29/13 07:58	12/03/13 23:08	1
Tetrachloro-m-xylene	31		30 - 150				11/29/13 07:58	12/03/13 23:08	1
DCB Decachlorobiphenyl	30		30 - 150				11/29/13 07:58	12/03/13 23:08	1
DCB Decachlorobiphenyl	24	X	30 - 150				11/29/13 07:58	12/03/13 23:08	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.568		0.568	0.227	mg/Kg	☼	11/26/13 10:00	12/01/13 00:54	1
Arsenic	3.62		1.14	0.454	mg/Kg	☼	11/26/13 10:00	12/02/13 17:05	1
Barium	29.2		0.568	0.125	mg/Kg	☼	11/26/13 10:00	12/01/13 00:54	1
Beryllium	0.293		0.227	0.0318	mg/Kg	☼	11/26/13 10:00	12/01/13 00:54	1
Cadmium	0.677		0.227	0.0341	mg/Kg	☼	11/26/13 10:00	12/01/13 00:54	1
Chromium	21.5		0.568	0.227	mg/Kg	☼	11/26/13 10:00	12/01/13 00:54	1
Nickel	29.4		1.14	0.261	mg/Kg	☼	11/26/13 10:00	12/01/13 00:54	1
Thallium	<1.14		1.14	0.341	mg/Kg	☼	11/26/13 10:00	12/02/13 17:05	1
Vanadium	23.1		0.568	0.125	mg/Kg	☼	11/26/13 10:00	12/01/13 00:54	1
Zinc	116	B	2.84	0.174	mg/Kg	☼	11/26/13 10:00	12/01/13 00:54	1
Lead	100		0.568	0.272	mg/Kg	☼	11/26/13 10:00	12/01/13 00:54	1
Selenium	1.19		0.568	0.454	mg/Kg	☼	11/26/13 10:00	12/02/13 17:05	1
Antimony	<0.568	^	0.568	0.454	mg/Kg	☼	11/26/13 10:00	12/02/13 17:05	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0760	J	0.111	0.00896	mg/Kg	☼	11/29/13 08:40	11/29/13 15:24	1

Client Sample ID: WCSS-54 (0-0.25)

Lab Sample ID: 480-50846-5

Date Collected: 11/22/13 08:35

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 96.2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.172		0.172	0.110	mg/Kg	☼	11/29/13 07:58	12/03/13 23:39	5
PCB-1221	<0.172		0.172	0.0836	mg/Kg	☼	11/29/13 07:58	12/03/13 23:39	5
PCB-1232	<0.172		0.172	0.0731	mg/Kg	☼	11/29/13 07:58	12/03/13 23:39	5
PCB-1242	<0.172		0.172	0.0679	mg/Kg	☼	11/29/13 07:58	12/03/13 23:39	5
PCB-1248	<0.172		0.172	0.0888	mg/Kg	☼	11/29/13 07:58	12/03/13 23:39	5
PCB-1254	<0.172		0.172	0.0888	mg/Kg	☼	11/29/13 07:58	12/03/13 23:39	5
PCB-1260	0.376		0.172	0.0888	mg/Kg	☼	11/29/13 07:58	12/03/13 23:39	5
PCB-1262	<0.172		0.172	0.141	mg/Kg	☼	11/29/13 07:58	12/03/13 23:39	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-54 (0-0.25)

Lab Sample ID: 480-50846-5

Date Collected: 11/22/13 08:35

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 96.2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1268	<0.172		0.172	0.0731	mg/Kg	☼	11/29/13 07:58	12/03/13 23:39	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	67		30 - 150				11/29/13 07:58	12/03/13 23:39	5
Tetrachloro-m-xylene	63		30 - 150				11/29/13 07:58	12/03/13 23:39	5
DCB Decachlorobiphenyl	0 X		30 - 150				11/29/13 07:58	12/03/13 23:39	5
DCB Decachlorobiphenyl	0 X		30 - 150				11/29/13 07:58	12/03/13 23:39	5

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.489		0.489	0.195	mg/Kg	☼	11/26/13 10:00	12/01/13 00:56	1
Arsenic	3.19		0.977	0.391	mg/Kg	☼	11/26/13 10:00	12/02/13 17:08	1
Barium	32.6		0.489	0.107	mg/Kg	☼	11/26/13 10:00	12/01/13 00:56	1
Beryllium	0.358		0.195	0.0274	mg/Kg	☼	11/26/13 10:00	12/01/13 00:56	1
Cadmium	0.690		0.195	0.0293	mg/Kg	☼	11/26/13 10:00	12/01/13 00:56	1
Chromium	34.2		0.489	0.195	mg/Kg	☼	11/26/13 10:00	12/01/13 00:56	1
Nickel	28.4		0.977	0.225	mg/Kg	☼	11/26/13 10:00	12/01/13 00:56	1
Thallium	<0.977		0.977	0.293	mg/Kg	☼	11/26/13 10:00	12/02/13 17:08	1
Vanadium	23.9		0.489	0.107	mg/Kg	☼	11/26/13 10:00	12/01/13 00:56	1
Zinc	131 B		2.44	0.150	mg/Kg	☼	11/26/13 10:00	12/01/13 00:56	1
Lead	106		0.489	0.235	mg/Kg	☼	11/26/13 10:00	12/01/13 00:56	1
Selenium	0.783		0.489	0.391	mg/Kg	☼	11/26/13 10:00	12/02/13 17:08	1
Antimony	<0.489 ^		0.489	0.391	mg/Kg	☼	11/26/13 10:00	12/02/13 17:08	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.111		0.0936	0.00758	mg/Kg	☼	11/29/13 08:40	11/29/13 15:26	1

Client Sample ID: WCSS-53 (0-0.25)

Lab Sample ID: 480-50846-6

Date Collected: 11/22/13 08:50

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 96.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.172		0.172	0.110	mg/Kg	☼	11/29/13 07:58	12/03/13 23:55	5
PCB-1221	<0.172		0.172	0.0836	mg/Kg	☼	11/29/13 07:58	12/03/13 23:55	5
PCB-1232	<0.172		0.172	0.0731	mg/Kg	☼	11/29/13 07:58	12/03/13 23:55	5
PCB-1242	<0.172		0.172	0.0679	mg/Kg	☼	11/29/13 07:58	12/03/13 23:55	5
PCB-1248	<0.172		0.172	0.0888	mg/Kg	☼	11/29/13 07:58	12/03/13 23:55	5
PCB-1254	<0.172		0.172	0.0888	mg/Kg	☼	11/29/13 07:58	12/03/13 23:55	5
PCB-1260	0.381		0.172	0.0888	mg/Kg	☼	11/29/13 07:58	12/03/13 23:55	5
PCB-1262	<0.172		0.172	0.141	mg/Kg	☼	11/29/13 07:58	12/03/13 23:55	5
PCB-1268	<0.172		0.172	0.0731	mg/Kg	☼	11/29/13 07:58	12/03/13 23:55	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	72		30 - 150				11/29/13 07:58	12/03/13 23:55	5
Tetrachloro-m-xylene	65		30 - 150				11/29/13 07:58	12/03/13 23:55	5
DCB Decachlorobiphenyl	0 X		30 - 150				11/29/13 07:58	12/03/13 23:55	5
DCB Decachlorobiphenyl	0 X		30 - 150				11/29/13 07:58	12/03/13 23:55	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-53 (0-0.25)

Lab Sample ID: 480-50846-6

Date Collected: 11/22/13 08:50

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 96.3

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.550		0.550	0.220	mg/Kg	☼	11/26/13 10:00	12/01/13 00:58	1
Arsenic	4.89		1.10	0.440	mg/Kg	☼	11/26/13 10:00	12/02/13 17:10	1
Barium	39.5		0.550	0.121	mg/Kg	☼	11/26/13 10:00	12/01/13 00:58	1
Beryllium	0.287		0.220	0.0308	mg/Kg	☼	11/26/13 10:00	12/01/13 00:58	1
Cadmium	1.32		0.220	0.0330	mg/Kg	☼	11/26/13 10:00	12/01/13 00:58	1
Chromium	55.3		0.550	0.220	mg/Kg	☼	11/26/13 10:00	12/01/13 00:58	1
Nickel	47.4		1.10	0.253	mg/Kg	☼	11/26/13 10:00	12/01/13 00:58	1
Thallium	<1.10		1.10	0.330	mg/Kg	☼	11/26/13 10:00	12/02/13 17:10	1
Vanadium	24.1		0.550	0.121	mg/Kg	☼	11/26/13 10:00	12/01/13 00:58	1
Zinc	239	B	2.75	0.168	mg/Kg	☼	11/26/13 10:00	12/01/13 00:58	1
Lead	161		0.550	0.264	mg/Kg	☼	11/26/13 10:00	12/01/13 00:58	1
Selenium	0.914		0.550	0.440	mg/Kg	☼	11/26/13 10:00	12/02/13 17:10	1
Antimony	0.573	^	0.550	0.440	mg/Kg	☼	11/26/13 10:00	12/02/13 17:10	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.172		0.0985	0.00798	mg/Kg	☼	11/29/13 08:40	11/29/13 15:28	1

Client Sample ID: WCSS-52 (0-0.25)

Lab Sample ID: 480-50846-7

Date Collected: 11/22/13 09:00

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 88.1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.376		0.376	0.239	mg/Kg	☼	11/29/13 07:58	12/04/13 00:11	10
PCB-1221	<0.376		0.376	0.182	mg/Kg	☼	11/29/13 07:58	12/04/13 00:11	10
PCB-1232	<0.376		0.376	0.160	mg/Kg	☼	11/29/13 07:58	12/04/13 00:11	10
PCB-1242	<0.376		0.376	0.148	mg/Kg	☼	11/29/13 07:58	12/04/13 00:11	10
PCB-1248	<0.376		0.376	0.194	mg/Kg	☼	11/29/13 07:58	12/04/13 00:11	10
PCB-1254	<0.376		0.376	0.194	mg/Kg	☼	11/29/13 07:58	12/04/13 00:11	10
PCB-1260	1.88		0.376	0.194	mg/Kg	☼	11/29/13 07:58	12/04/13 00:11	10
PCB-1262	<0.376		0.376	0.308	mg/Kg	☼	11/29/13 07:58	12/04/13 00:11	10
PCB-1268	<0.376		0.376	0.160	mg/Kg	☼	11/29/13 07:58	12/04/13 00:11	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 07:58	12/04/13 00:11	10
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 07:58	12/04/13 00:11	10
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 07:58	12/04/13 00:11	10
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 07:58	12/04/13 00:11	10

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.621		0.621	0.248	mg/Kg	☼	11/26/13 10:00	12/01/13 01:00	1
Arsenic	3.52		1.24	0.497	mg/Kg	☼	11/26/13 10:00	12/02/13 17:13	1
Barium	249		0.621	0.137	mg/Kg	☼	11/26/13 10:00	12/01/13 01:00	1
Beryllium	0.271		0.248	0.0348	mg/Kg	☼	11/26/13 10:00	12/01/13 01:00	1
Cadmium	3.51		0.248	0.0373	mg/Kg	☼	11/26/13 10:00	12/01/13 01:00	1
Chromium	29.1		0.621	0.248	mg/Kg	☼	11/26/13 10:00	12/01/13 01:00	1
Nickel	32.0		1.24	0.286	mg/Kg	☼	11/26/13 10:00	12/01/13 01:00	1
Thallium	<1.24		1.24	0.373	mg/Kg	☼	11/26/13 10:00	12/02/13 17:13	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-52 (0-0.25)

Lab Sample ID: 480-50846-7

Date Collected: 11/22/13 09:00

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 88.1

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	17.9		0.621	0.137	mg/Kg	☼	11/26/13 10:00	12/01/13 01:00	1
Zinc	722	B	3.10	0.190	mg/Kg	☼	11/26/13 10:00	12/01/13 01:00	1
Lead	338		0.621	0.298	mg/Kg	☼	11/26/13 10:00	12/01/13 01:00	1
Selenium	<0.621		0.621	0.497	mg/Kg	☼	11/26/13 10:00	12/02/13 17:13	1
Antimony	1.76	^	0.621	0.497	mg/Kg	☼	11/26/13 10:00	12/02/13 17:13	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.830		0.111	0.00898	mg/Kg	☼	11/29/13 08:40	11/29/13 15:30	1

Client Sample ID: WCSS-51 (0-0.25)

Lab Sample ID: 480-50846-8

Date Collected: 11/22/13 09:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 88.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.739		0.739	0.470	mg/Kg	☼	12/03/13 10:08	12/09/13 17:07	20
PCB-1221	<0.739		0.739	0.358	mg/Kg	☼	12/03/13 10:08	12/09/13 17:07	20
PCB-1232	<0.739		0.739	0.314	mg/Kg	☼	12/03/13 10:08	12/09/13 17:07	20
PCB-1242	<0.739		0.739	0.291	mg/Kg	☼	12/03/13 10:08	12/09/13 17:07	20
PCB-1248	<0.739		0.739	0.381	mg/Kg	☼	12/03/13 10:08	12/09/13 17:07	20
PCB-1254	<0.739		0.739	0.381	mg/Kg	☼	12/03/13 10:08	12/09/13 17:07	20
PCB-1260	3.15		0.739	0.381	mg/Kg	☼	12/03/13 10:08	12/09/13 17:07	20
PCB-1262	<0.739		0.739	0.605	mg/Kg	☼	12/03/13 10:08	12/09/13 17:07	20
PCB-1268	<0.739		0.739	0.314	mg/Kg	☼	12/03/13 10:08	12/09/13 17:07	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	12/03/13 10:08	12/09/13 17:07	20
Tetrachloro-m-xylene	0	X	30 - 150	12/03/13 10:08	12/09/13 17:07	20
DCB Decachlorobiphenyl	0	X	30 - 150	12/03/13 10:08	12/09/13 17:07	20
DCB Decachlorobiphenyl	0	X	30 - 150	12/03/13 10:08	12/09/13 17:07	20

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.579		0.579	0.231	mg/Kg	☼	11/26/13 10:00	12/01/13 01:03	1
Arsenic	5.47		1.16	0.463	mg/Kg	☼	11/26/13 10:00	12/02/13 17:16	1
Barium	78.1		0.579	0.127	mg/Kg	☼	11/26/13 10:00	12/01/13 01:03	1
Beryllium	0.758		0.231	0.0324	mg/Kg	☼	11/26/13 10:00	12/01/13 01:03	1
Cadmium	5.51		0.231	0.0347	mg/Kg	☼	11/26/13 10:00	12/01/13 01:03	1
Chromium	29.9		0.579	0.231	mg/Kg	☼	11/26/13 10:00	12/01/13 01:03	1
Nickel	32.5		1.16	0.266	mg/Kg	☼	11/26/13 10:00	12/01/13 01:03	1
Thallium	<1.16		1.16	0.347	mg/Kg	☼	11/26/13 10:00	12/02/13 17:16	1
Vanadium	16.2		0.579	0.127	mg/Kg	☼	11/26/13 10:00	12/01/13 01:03	1
Zinc	613	B	2.89	0.177	mg/Kg	☼	11/26/13 10:00	12/01/13 01:03	1
Lead	617		0.579	0.278	mg/Kg	☼	11/26/13 10:00	12/01/13 01:03	1
Selenium	0.520	J	0.579	0.463	mg/Kg	☼	11/26/13 10:00	12/02/13 17:16	1
Antimony	2.60	^	0.579	0.463	mg/Kg	☼	11/26/13 10:00	12/02/13 17:16	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.76		1.07	0.0865	mg/Kg	☼	11/29/13 08:40	11/29/13 15:32	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-49 (0-0.25)

Lab Sample ID: 480-50846-9

Date Collected: 11/22/13 09:20

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 86.5

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.383		0.383	0.244	mg/Kg	☼	11/29/13 07:58	12/03/13 16:34	10
PCB-1221	<0.383		0.383	0.186	mg/Kg	☼	11/29/13 07:58	12/03/13 16:34	10
PCB-1232	<0.383		0.383	0.163	mg/Kg	☼	11/29/13 07:58	12/03/13 16:34	10
PCB-1242	<0.383		0.383	0.151	mg/Kg	☼	11/29/13 07:58	12/03/13 16:34	10
PCB-1248	<0.383		0.383	0.198	mg/Kg	☼	11/29/13 07:58	12/03/13 16:34	10
PCB-1254	<0.383		0.383	0.198	mg/Kg	☼	11/29/13 07:58	12/03/13 16:34	10
PCB-1260	1.55		0.383	0.198	mg/Kg	☼	11/29/13 07:58	12/03/13 16:34	10
PCB-1262	<0.383		0.383	0.314	mg/Kg	☼	11/29/13 07:58	12/03/13 16:34	10
PCB-1268	<0.383		0.383	0.163	mg/Kg	☼	11/29/13 07:58	12/03/13 16:34	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 07:58	12/03/13 16:34	10
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 07:58	12/03/13 16:34	10
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 07:58	12/03/13 16:34	10
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 07:58	12/03/13 16:34	10

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	2.63		0.552	0.221	mg/Kg	☼	11/26/13 10:00	12/01/13 01:05	1
Arsenic	9.11		1.10	0.441	mg/Kg	☼	11/26/13 10:00	12/02/13 17:18	1
Barium	392		0.552	0.121	mg/Kg	☼	11/26/13 10:00	12/01/13 01:05	1
Beryllium	0.430		0.221	0.0309	mg/Kg	☼	11/26/13 10:00	12/01/13 01:05	1
Cadmium	6.10		0.221	0.0331	mg/Kg	☼	11/26/13 10:00	12/01/13 01:05	1
Chromium	44.1		0.552	0.221	mg/Kg	☼	11/26/13 10:00	12/01/13 01:05	1
Nickel	50.8		1.10	0.254	mg/Kg	☼	11/26/13 10:00	12/01/13 01:05	1
Thallium	<1.10		1.10	0.331	mg/Kg	☼	11/26/13 10:00	12/02/13 17:18	1
Vanadium	23.1		0.552	0.121	mg/Kg	☼	11/26/13 10:00	12/01/13 01:05	1
Zinc	1500	B	2.76	0.169	mg/Kg	☼	11/26/13 10:00	12/01/13 01:05	1
Lead	1340		0.552	0.265	mg/Kg	☼	11/26/13 10:00	12/01/13 01:05	1
Selenium	1.08		0.552	0.441	mg/Kg	☼	11/26/13 10:00	12/02/13 17:18	1
Antimony	16.4	^	0.552	0.441	mg/Kg	☼	11/26/13 10:00	12/02/13 17:18	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	8.79		2.29	0.185	mg/Kg	☼	11/29/13 08:40	11/29/13 15:33	20

Client Sample ID: WCSS-50 (0-0.25)

Lab Sample ID: 480-50846-10

Date Collected: 11/22/13 09:30

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.4

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.564		0.564	0.226	mg/Kg	☼	11/26/13 10:00	12/01/13 01:08	1
Arsenic	3.32		1.13	0.451	mg/Kg	☼	11/26/13 10:00	12/02/13 17:21	1
Barium	31.8		0.564	0.124	mg/Kg	☼	11/26/13 10:00	12/01/13 01:08	1
Beryllium	0.288		0.226	0.0316	mg/Kg	☼	11/26/13 10:00	12/01/13 01:08	1
Cadmium	0.524		0.226	0.0338	mg/Kg	☼	11/26/13 10:00	12/01/13 01:08	1
Chromium	10.4		0.564	0.226	mg/Kg	☼	11/26/13 10:00	12/01/13 01:08	1
Nickel	9.59		1.13	0.259	mg/Kg	☼	11/26/13 10:00	12/01/13 01:08	1
Thallium	<1.13		1.13	0.338	mg/Kg	☼	11/26/13 10:00	12/02/13 17:21	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-50 (0-0.25)

Lab Sample ID: 480-50846-10

Date Collected: 11/22/13 09:30

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.4

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	23.8		0.564	0.124	mg/Kg	☼	11/26/13 10:00	12/01/13 01:08	1
Zinc	103	B	2.82	0.173	mg/Kg	☼	11/26/13 10:00	12/01/13 01:08	1
Lead	69.7		0.564	0.271	mg/Kg	☼	11/26/13 10:00	12/01/13 01:08	1
Selenium	<0.564		0.564	0.451	mg/Kg	☼	11/26/13 10:00	12/02/13 17:21	1
Antimony	<0.564	^	0.564	0.451	mg/Kg	☼	11/26/13 10:00	12/02/13 17:21	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0705	J	0.113	0.00912	mg/Kg	☼	11/29/13 08:40	11/29/13 15:36	1

Client Sample ID: WCSS-58 (0-0.25)

Lab Sample ID: 480-50846-11

Date Collected: 11/22/13 09:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 93.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.180		0.180	0.115	mg/Kg	☼	11/29/13 07:58	12/03/13 16:50	5
PCB-1221	<0.180		0.180	0.0874	mg/Kg	☼	11/29/13 07:58	12/03/13 16:50	5
PCB-1232	<0.180		0.180	0.0765	mg/Kg	☼	11/29/13 07:58	12/03/13 16:50	5
PCB-1242	<0.180		0.180	0.0710	mg/Kg	☼	11/29/13 07:58	12/03/13 16:50	5
PCB-1248	<0.180		0.180	0.0929	mg/Kg	☼	11/29/13 07:58	12/03/13 16:50	5
PCB-1254	<0.180		0.180	0.0929	mg/Kg	☼	11/29/13 07:58	12/03/13 16:50	5
PCB-1260	0.305		0.180	0.0929	mg/Kg	☼	11/29/13 07:58	12/03/13 16:50	5
PCB-1262	<0.180		0.180	0.147	mg/Kg	☼	11/29/13 07:58	12/03/13 16:50	5
PCB-1268	<0.180		0.180	0.0765	mg/Kg	☼	11/29/13 07:58	12/03/13 16:50	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		30 - 150	11/29/13 07:58	12/03/13 16:50	5
Tetrachloro-m-xylene	74		30 - 150	11/29/13 07:58	12/03/13 16:50	5
DCB Decachlorobiphenyl	103		30 - 150	11/29/13 07:58	12/03/13 16:50	5
DCB Decachlorobiphenyl	74		30 - 150	11/29/13 07:58	12/03/13 16:50	5

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.493		0.493	0.197	mg/Kg	☼	11/26/13 10:00	12/01/13 01:10	1
Arsenic	3.42		0.986	0.394	mg/Kg	☼	11/26/13 10:00	12/02/13 17:34	1
Barium	49.1		0.493	0.108	mg/Kg	☼	11/26/13 10:00	12/01/13 01:10	1
Beryllium	0.277		0.197	0.0276	mg/Kg	☼	11/26/13 10:00	12/01/13 01:10	1
Cadmium	0.654		0.197	0.0296	mg/Kg	☼	11/26/13 10:00	12/01/13 01:10	1
Chromium	25.4		0.493	0.197	mg/Kg	☼	11/26/13 10:00	12/01/13 01:10	1
Nickel	23.7		0.986	0.227	mg/Kg	☼	11/26/13 10:00	12/01/13 01:10	1
Thallium	<0.986		0.986	0.296	mg/Kg	☼	11/26/13 10:00	12/02/13 17:34	1
Vanadium	22.9		0.493	0.108	mg/Kg	☼	11/26/13 10:00	12/01/13 01:10	1
Zinc	137	B	2.46	0.151	mg/Kg	☼	11/26/13 10:00	12/02/13 17:34	1
Lead	121		0.493	0.237	mg/Kg	☼	11/26/13 10:00	12/01/13 01:10	1
Selenium	<0.493		0.493	0.394	mg/Kg	☼	11/26/13 10:00	12/02/13 17:34	1
Antimony	<0.493	^	0.493	0.394	mg/Kg	☼	11/26/13 10:00	12/02/13 17:34	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0807	J	0.0981	0.00794	mg/Kg	☼	11/29/13 08:40	11/29/13 15:41	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-958 (0-0.25)

Lab Sample ID: 480-50846-12

Date Collected: 11/22/13 09:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.5

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.182		0.182	0.116	mg/Kg	☆	11/29/13 07:58	12/03/13 17:06	5
PCB-1221	<0.182		0.182	0.0881	mg/Kg	☆	11/29/13 07:58	12/03/13 17:06	5
PCB-1232	<0.182		0.182	0.0771	mg/Kg	☆	11/29/13 07:58	12/03/13 17:06	5
PCB-1242	<0.182		0.182	0.0716	mg/Kg	☆	11/29/13 07:58	12/03/13 17:06	5
PCB-1248	<0.182		0.182	0.0936	mg/Kg	☆	11/29/13 07:58	12/03/13 17:06	5
PCB-1254	<0.182		0.182	0.0936	mg/Kg	☆	11/29/13 07:58	12/03/13 17:06	5
PCB-1260	0.254		0.182	0.0936	mg/Kg	☆	11/29/13 07:58	12/03/13 17:06	5
PCB-1262	<0.182		0.182	0.149	mg/Kg	☆	11/29/13 07:58	12/03/13 17:06	5
PCB-1268	<0.182		0.182	0.0771	mg/Kg	☆	11/29/13 07:58	12/03/13 17:06	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	69		30 - 150	11/29/13 07:58	12/03/13 17:06	5
Tetrachloro-m-xylene	70		30 - 150	11/29/13 07:58	12/03/13 17:06	5
DCB Decachlorobiphenyl	111		30 - 150	11/29/13 07:58	12/03/13 17:06	5
DCB Decachlorobiphenyl	66		30 - 150	11/29/13 07:58	12/03/13 17:06	5

Client Sample ID: WCSS-56 (0-0.25)

Lab Sample ID: 480-50846-13

Date Collected: 11/22/13 10:00

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 91.2

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00390		0.00390	0.000779	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,1,1-Trichloroethane	<0.00390		0.00390	0.000566	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,1,1,2,2-Tetrachloroethane	<0.00390		0.00390	0.00126	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,1,2-Trichloroethane	<0.00390		0.00390	0.00101	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,1-Dichloroethane	<0.00390		0.00390	0.000950	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,1-Dichloroethene	<0.00390		0.00390	0.000954	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,1-Dichloropropene	<0.00390		0.00390	0.00111	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,2,3-Trichlorobenzene	<0.00390		0.00390	0.000827	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,2,3-Trichloropropane	<0.00390		0.00390	0.000793	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,2,4-Trichlorobenzene	<0.00390		0.00390	0.000474	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,2,4-Trimethylbenzene	<0.00390		0.00390	0.00150	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,2-Dibromo-3-Chloropropane	<0.0390		0.0390	0.00390	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,2-Dichlorobenzene	<0.00390		0.00390	0.000609	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,2-Dichloroethane	<0.00390		0.00390	0.000391	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,2-Dichloropropane	<0.00390		0.00390	0.00390	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,3,5-Trimethylbenzene	<0.00390		0.00390	0.000502	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,3-Dichlorobenzene	<0.00390		0.00390	0.000400	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,3-Dichloropropane	<0.00390		0.00390	0.000467	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,4-Dichlorobenzene	<0.00390		0.00390	0.00109	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
1,4-Dioxane	<0.390		0.390	0.0376	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
2,2-Dichloropropane	<0.00390		0.00390	0.00132	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
2-Butanone (MEK)	<0.0390	*	0.0390	0.00285	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
2-Chlorotoluene	<0.00390		0.00390	0.000511	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
2-Hexanone	<0.0390		0.0390	0.00390	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
4-Chlorotoluene	<0.00390		0.00390	0.000919	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
4-Isopropyltoluene	<0.00390		0.00390	0.000625	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
4-Methyl-2-pentanone (MIBK)	<0.0390		0.0390	0.00256	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1
Acetone	<0.390		0.390	0.00656	mg/Kg	☆	11/26/13 10:30	11/26/13 15:06	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-56 (0-0.25)

Lab Sample ID: 480-50846-13

Date Collected: 11/22/13 10:00

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 91.2

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00390		0.00390	0.000382	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Bromobenzene	<0.00390		0.00390	0.00137	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Bromoform	<0.00390		0.00390	0.00390	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Bromomethane	<0.00779		0.00779	0.000701	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Carbon disulfide	<0.00390		0.00390	0.00390	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Carbon tetrachloride	<0.00390		0.00390	0.000754	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Chlorobenzene	<0.00390		0.00390	0.00103	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Chlorobromomethane	<0.00390		0.00390	0.000562	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Chlorodibromomethane	<0.00390		0.00390	0.000997	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Chloroethane	<0.00779		0.00779	0.00176	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Chloroform	<0.00390		0.00390	0.000481	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Chloromethane	<0.00779		0.00779	0.000471	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
cis-1,2-Dichloroethene	<0.00390		0.00390	0.000997	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
cis-1,3-Dichloropropene	<0.00390		0.00390	0.00112	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Dichlorobromomethane	<0.00390		0.00390	0.00104	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Dichlorodifluoromethane	<0.00779		0.00779	0.000644	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Ethyl ether	<0.00390		0.00390	0.00327	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Ethylbenzene	0.00307	J	0.00390	0.000538	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Ethylene Dibromide	<0.00390		0.00390	0.00100	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Hexachlorobutadiene	<0.00390		0.00390	0.000913	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Isopropyl ether	<0.00390		0.00390	0.00390	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Isopropylbenzene	<0.00390		0.00390	0.00117	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Methyl tert-butyl ether	<0.00390		0.00390	0.000765	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Methylene Chloride	<0.00390		0.00390	0.00358	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
m-Xylene & p-Xylene	0.0130		0.00779	0.00131	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Naphthalene	<0.0390		0.0390	0.00104	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
n-Butylbenzene	<0.00390		0.00390	0.000678	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
N-Propylbenzene	<0.00390		0.00390	0.000623	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
o-Xylene	0.00510		0.00390	0.00102	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
sec-Butylbenzene	<0.00390		0.00390	0.000678	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Styrene	<0.00390		0.00390	0.000390	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Tert-amyl methyl ether	<0.00390		0.00390	0.00199	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Tert-butyl ethyl ether	<0.00390		0.00390	0.00343	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
tert-Butylbenzene	<0.00390		0.00390	0.000810	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Tetrachloroethene	0.0510		0.00390	0.00105	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Tetrahydrofuran	<0.0779		0.0779	0.00717	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Toluene	<0.00390		0.00390	0.000589	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
trans-1,2-Dichloroethene	<0.00390		0.00390	0.000804	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
trans-1,3-Dichloropropene	<0.00390		0.00390	0.00343	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Trichloroethene	<0.00390		0.00390	0.00171	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Trichlorofluoromethane	<0.00779		0.00779	0.000737	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Vinyl chloride	<0.00390		0.00390	0.000950	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Dibromomethane	<0.00390		0.00390	0.000802	mg/Kg	☼	11/26/13 10:30	11/26/13 15:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130				11/26/13 10:30	11/26/13 15:06	1
1,2-Dichloroethane-d4 (Surr)	107		70 - 130				11/26/13 10:30	11/26/13 15:06	1
4-Bromofluorobenzene (Surr)	96		70 - 130				11/26/13 10:30	11/26/13 15:06	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-55 (0-0.25)

Lab Sample ID: 480-50846-14

Date Collected: 11/22/13 10:05

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 92.8

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00207		0.00207	0.000413	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,1,1-Trichloroethane	<0.00207		0.00207	0.000300	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,1,2,2-Tetrachloroethane	<0.00207		0.00207	0.000670	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,1,2-Trichloroethane	<0.00207		0.00207	0.000537	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,1-Dichloroethane	<0.00207		0.00207	0.000504	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,1-Dichloroethene	<0.00207		0.00207	0.000506	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,1-Dichloropropene	<0.00207		0.00207	0.000587	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,2,3-Trichlorobenzene	<0.00207		0.00207	0.000439	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,2,3-Trichloropropane	<0.00207		0.00207	0.000421	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,2,4-Trichlorobenzene	<0.00207		0.00207	0.000251	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,2,4-Trimethylbenzene	<0.00207		0.00207	0.000794	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,2-Dibromo-3-Chloropropane	<0.0207		0.0207	0.00207	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,2-Dichlorobenzene	<0.00207		0.00207	0.000323	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,2-Dichloroethane	<0.00207		0.00207	0.000207	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,2-Dichloropropane	<0.00207		0.00207	0.00207	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,3,5-Trimethylbenzene	<0.00207		0.00207	0.000266	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,3-Dichlorobenzene	<0.00207		0.00207	0.000212	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,3-Dichloropropane	<0.00207		0.00207	0.000248	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,4-Dichlorobenzene	<0.00207		0.00207	0.000579	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
1,4-Dioxane	<0.207		0.207	0.0199	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
2,2-Dichloropropane	<0.00207		0.00207	0.000703	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
2-Butanone (MEK)	<0.0207	*	0.0207	0.00151	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
2-Chlorotoluene	<0.00207		0.00207	0.000271	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
2-Hexanone	<0.0207		0.0207	0.00207	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
4-Chlorotoluene	<0.00207		0.00207	0.000488	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
4-Isopropyltoluene	<0.00207		0.00207	0.000331	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
4-Methyl-2-pentanone (MIBK)	<0.0207		0.0207	0.00136	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Acetone	<0.207		0.207	0.00348	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Benzene	<0.00207		0.00207	0.000203	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Bromobenzene	<0.00207		0.00207	0.000727	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Bromoform	<0.00207		0.00207	0.00207	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Bromomethane	<0.00413		0.00413	0.000372	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Carbon disulfide	<0.00207		0.00207	0.00207	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Carbon tetrachloride	<0.00207		0.00207	0.000400	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Chlorobenzene	<0.00207		0.00207	0.000546	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Chlorobromomethane	<0.00207		0.00207	0.000298	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Chlorodibromomethane	<0.00207		0.00207	0.000529	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Chloroethane	<0.00413		0.00413	0.000934	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Chloroform	<0.00207		0.00207	0.000255	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Chloromethane	<0.00413		0.00413	0.000250	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
cis-1,2-Dichloroethene	<0.00207		0.00207	0.000529	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
cis-1,3-Dichloropropene	<0.00207		0.00207	0.000595	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Dichlorobromomethane	<0.00207		0.00207	0.000554	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Dichlorodifluoromethane	<0.00413		0.00413	0.000341	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Ethyl ether	<0.00207		0.00207	0.00174	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Ethylbenzene	0.000905	J	0.00207	0.000285	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Ethylene Dibromide	<0.00207		0.00207	0.000531	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Hexachlorobutadiene	<0.00207		0.00207	0.000484	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Isopropyl ether	<0.00207		0.00207	0.00207	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-55 (0-0.25)

Lab Sample ID: 480-50846-14

Date Collected: 11/22/13 10:05

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 92.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	<0.00207		0.00207	0.000623	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Methyl tert-butyl ether	<0.00207		0.00207	0.000406	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Methylene Chloride	<0.00207		0.00207	0.00190	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
m-Xylene & p-Xylene	0.00368	J	0.00413	0.000694	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Naphthalene	<0.0207		0.0207	0.000554	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
n-Butylbenzene	<0.00207		0.00207	0.000360	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
N-Propylbenzene	<0.00207		0.00207	0.000331	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
o-Xylene	0.00148	J	0.00207	0.000540	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
sec-Butylbenzene	<0.00207		0.00207	0.000360	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Styrene	<0.00207		0.00207	0.000207	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Tert-amyl methyl ether	<0.00207		0.00207	0.00106	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Tert-butyl ethyl ether	<0.00207		0.00207	0.00182	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
tert-Butylbenzene	<0.00207		0.00207	0.000430	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Tetrachloroethene	<0.00207		0.00207	0.000555	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Tetrahydrofuran	<0.0413		0.0413	0.00380	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Toluene	<0.00207		0.00207	0.000312	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
trans-1,2-Dichloroethene	<0.00207		0.00207	0.000427	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
trans-1,3-Dichloropropene	<0.00207		0.00207	0.00182	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Trichloroethene	<0.00207		0.00207	0.000909	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Trichlorofluoromethane	<0.00413		0.00413	0.000391	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Vinyl chloride	<0.00207		0.00207	0.000504	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1
Dibromomethane	<0.00207		0.00207	0.000426	mg/Kg	☼	11/26/13 10:30	11/26/13 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		70 - 130	11/26/13 10:30	11/26/13 15:31	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	11/26/13 10:30	11/26/13 15:31	1
4-Bromofluorobenzene (Surr)	96		70 - 130	11/26/13 10:30	11/26/13 15:31	1

Client Sample ID: WCSS-57 (0-0.25)

Lab Sample ID: 480-50846-15

Date Collected: 11/22/13 10:15

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 87.8

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00268		0.00268	0.000535	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,1,1-Trichloroethane	<0.00268		0.00268	0.000389	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,1,1,2,2-Tetrachloroethane	<0.00268		0.00268	0.000869	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,1,2-Trichloroethane	<0.00268		0.00268	0.000696	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,1-Dichloroethane	<0.00268		0.00268	0.000653	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,1-Dichloroethene	<0.00268		0.00268	0.000655	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,1-Dichloropropene	<0.00268		0.00268	0.000760	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,2,3-Trichlorobenzene	<0.00268		0.00268	0.000569	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,2,3-Trichloropropane	<0.00268		0.00268	0.000545	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,2,4-Trichlorobenzene	<0.00268		0.00268	0.000326	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,2,4-Trimethylbenzene	<0.00268		0.00268	0.00103	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,2-Dibromo-3-Chloropropane	<0.0268		0.0268	0.00268	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,2-Dichlorobenzene	<0.00268		0.00268	0.000419	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,2-Dichloroethane	<0.00268		0.00268	0.000269	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,2-Dichloropropane	<0.00268		0.00268	0.00268	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
1,3,5-Trimethylbenzene	<0.00268		0.00268	0.000345	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-57 (0-0.25)

Lab Sample ID: 480-50846-15

Date Collected: 11/22/13 10:15

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 87.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	<0.00268		0.00268	0.000275	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
1,3-Dichloropropane	<0.00268		0.00268	0.000321	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
1,4-Dichlorobenzene	<0.00268		0.00268	0.000750	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
1,4-Dioxane	<0.268		0.268	0.0258	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
2,2-Dichloropropane	<0.00268		0.00268	0.000910	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
2-Butanone (MEK)	<0.0268	*	0.0268	0.00196	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
2-Chlorotoluene	<0.00268		0.00268	0.000351	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
2-Hexanone	<0.0268		0.0268	0.00268	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
4-Chlorotoluene	<0.00268		0.00268	0.000632	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
4-Isopropyltoluene	<0.00268		0.00268	0.000429	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
4-Methyl-2-pentanone (MIBK)	<0.0268		0.0268	0.00176	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Acetone	<0.268		0.268	0.00451	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Benzene	<0.00268		0.00268	0.000262	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Bromobenzene	<0.00268		0.00268	0.000942	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Bromoform	<0.00268		0.00268	0.00268	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Bromomethane	<0.00535		0.00535	0.000482	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Carbon disulfide	<0.00268		0.00268	0.00268	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Carbon tetrachloride	<0.00268		0.00268	0.000518	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Chlorobenzene	<0.00268		0.00268	0.000707	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Chlorobromomethane	<0.00268		0.00268	0.000387	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Chlorodibromomethane	<0.00268		0.00268	0.000685	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Chloroethane	<0.00535		0.00535	0.00121	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Chloroform	<0.00268		0.00268	0.000331	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Chloromethane	<0.00535		0.00535	0.000323	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
cis-1,2-Dichloroethene	<0.00268		0.00268	0.000685	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
cis-1,3-Dichloropropene	<0.00268		0.00268	0.000771	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Dichlorobromomethane	<0.00268		0.00268	0.000718	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Dichlorodifluoromethane	<0.00535		0.00535	0.000442	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Ethyl ether	<0.00268		0.00268	0.00225	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Ethylbenzene	0.00227	J	0.00268	0.000369	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Ethylene Dibromide	<0.00268		0.00268	0.000688	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Hexachlorobutadiene	<0.00268		0.00268	0.000628	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Isopropyl ether	<0.00268		0.00268	0.00268	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Isopropylbenzene	<0.00268		0.00268	0.000807	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Methyl tert-butyl ether	<0.00268		0.00268	0.000526	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Methylene Chloride	<0.00268		0.00268	0.00246	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
m-Xylene & p-Xylene	0.00855		0.00535	0.000900	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Naphthalene	<0.0268		0.0268	0.000718	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
n-Butylbenzene	<0.00268		0.00268	0.000466	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
N-Propylbenzene	<0.00268		0.00268	0.000428	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
o-Xylene	0.00339		0.00268	0.000699	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
sec-Butylbenzene	<0.00268		0.00268	0.000466	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Styrene	<0.00268		0.00268	0.000268	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Tert-amyl methyl ether	<0.00268		0.00268	0.00137	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Tert-butyl ethyl ether	<0.00268		0.00268	0.00236	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
tert-Butylbenzene	<0.00268		0.00268	0.000557	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Tetrachloroethene	<0.00268		0.00268	0.000719	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Tetrahydrofuran	<0.0535		0.0535	0.00493	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1
Toluene	0.0381		0.00268	0.000405	mg/Kg	✱	11/26/13 10:30	11/26/13 15:56	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-57 (0-0.25)

Lab Sample ID: 480-50846-15

Date Collected: 11/22/13 10:15

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 87.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.00268		0.00268	0.000553	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
trans-1,3-Dichloropropene	<0.00268		0.00268	0.00236	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
Trichloroethene	<0.00268		0.00268	0.00118	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
Trichlorofluoromethane	<0.00535		0.00535	0.000507	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
Vinyl chloride	<0.00268		0.00268	0.000653	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1
Dibromomethane	<0.00268		0.00268	0.000552	mg/Kg	☼	11/26/13 10:30	11/26/13 15:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		70 - 130	11/26/13 10:30	11/26/13 15:56	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	11/26/13 10:30	11/26/13 15:56	1
4-Bromofluorobenzene (Surr)	99		70 - 130	11/26/13 10:30	11/26/13 15:56	1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0376		0.0376	0.0239	mg/Kg	☼	11/29/13 07:58	12/03/13 17:21	1
PCB-1221	<0.0376		0.0376	0.0182	mg/Kg	☼	11/29/13 07:58	12/03/13 17:21	1
PCB-1232	<0.0376		0.0376	0.0159	mg/Kg	☼	11/29/13 07:58	12/03/13 17:21	1
PCB-1242	<0.0376		0.0376	0.0148	mg/Kg	☼	11/29/13 07:58	12/03/13 17:21	1
PCB-1248	<0.0376		0.0376	0.0194	mg/Kg	☼	11/29/13 07:58	12/03/13 17:21	1
PCB-1254	<0.0376		0.0376	0.0194	mg/Kg	☼	11/29/13 07:58	12/03/13 17:21	1
PCB-1260	0.105		0.0376	0.0194	mg/Kg	☼	11/29/13 07:58	12/03/13 17:21	1
PCB-1262	<0.0376		0.0376	0.0308	mg/Kg	☼	11/29/13 07:58	12/03/13 17:21	1
PCB-1268	<0.0376		0.0376	0.0159	mg/Kg	☼	11/29/13 07:58	12/03/13 17:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	46		30 - 150	11/29/13 07:58	12/03/13 17:21	1
Tetrachloro-m-xylene	44		30 - 150	11/29/13 07:58	12/03/13 17:21	1
DCB Decachlorobiphenyl	79		30 - 150	11/29/13 07:58	12/03/13 17:21	1
DCB Decachlorobiphenyl	38		30 - 150	11/29/13 07:58	12/03/13 17:21	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.528		0.528	0.0855	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Acenaphthylene	<0.528		0.528	0.0950	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Anthracene	<0.528		0.528	0.100	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Benzo[a]anthracene	0.839		0.528	0.0803	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Benzo[a]pyrene	1.38		0.528	0.0760	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Benzo[b]fluoranthene	2.17		0.528	0.0750	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Benzo[g,h,i]perylene	<0.528		0.528	0.0898	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Benzo[k]fluoranthene	0.798		0.528	0.0771	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
2-Methylnaphthalene	<0.528		0.528	0.103	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Chrysene	1.38		0.528	0.0940	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Dibenz(a,h)anthracene	<0.528		0.528	0.0739	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Fluoranthene	1.92		0.528	0.0929	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Fluorene	<0.528		0.528	0.106	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Indeno[1,2,3-cd]pyrene	<0.528		0.528	0.0771	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Naphthalene	<0.528		0.528	0.0887	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Phenanthrene	0.677		0.528	0.106	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Pyrene	1.76		0.528	0.0961	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
C11-C22 Aromatics (unadjusted)	53.5		5.28	2.11	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-57 (0-0.25)

Lab Sample ID: 480-50846-15

Date Collected: 11/22/13 10:15

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 87.8

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C19-C36 Aliphatics	59.0		5.28	2.11	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
C9-C18 Aliphatics	<5.28		5.28	2.11	mg/Kg	☼	11/26/13 10:37	11/29/13 17:22	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	42.6		5.70	5.70	mg/Kg	☼		12/03/13 12:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	41		40 - 140				11/26/13 10:37	11/29/13 17:22	1
2-Bromonaphthalene	71		40 - 140				11/26/13 10:37	11/29/13 17:22	1
2-Fluorobiphenyl	89		40 - 140				11/26/13 10:37	11/29/13 17:22	1
o-Terphenyl	37	X	40 - 140				11/26/13 10:37	11/29/13 17:22	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.537		0.537	0.215	mg/Kg	☼	11/26/13 10:00	12/01/13 01:29	1
Arsenic	2.38		1.07	0.430	mg/Kg	☼	11/26/13 10:00	12/02/13 17:47	1
Barium	22.9		0.537	0.118	mg/Kg	☼	11/26/13 10:00	12/01/13 01:29	1
Beryllium	0.186	J	0.215	0.0301	mg/Kg	☼	11/26/13 10:00	12/01/13 01:29	1
Cadmium	0.343		0.215	0.0322	mg/Kg	☼	11/26/13 10:00	12/01/13 01:29	1
Chromium	10.3		0.537	0.215	mg/Kg	☼	11/26/13 10:00	12/01/13 01:29	1
Nickel	12.0		1.07	0.247	mg/Kg	☼	11/26/13 10:00	12/01/13 01:29	1
Thallium	<1.07		1.07	0.322	mg/Kg	☼	11/26/13 10:00	12/02/13 17:47	1
Vanadium	27.9		0.537	0.118	mg/Kg	☼	11/26/13 10:00	12/01/13 01:29	1
Zinc	79.6	B	2.68	0.164	mg/Kg	☼	11/26/13 10:00	12/01/13 01:29	1
Lead	48.0		0.537	0.258	mg/Kg	☼	11/26/13 10:00	12/01/13 01:29	1
Selenium	<0.537		0.537	0.430	mg/Kg	☼	11/26/13 10:00	12/02/13 17:47	1
Antimony	<0.537	^	0.537	0.430	mg/Kg	☼	11/26/13 10:00	12/02/13 17:47	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.109	J	0.111	0.00901	mg/Kg	☼	11/29/13 08:40	11/29/13 15:55	1

Client Sample ID: WCSS-62 (0-0.25)

Lab Sample ID: 480-50846-16

Date Collected: 11/22/13 10:35

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.6

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.362		0.362	0.230	mg/Kg	☼	11/29/13 07:58	12/03/13 17:53	10
PCB-1221	<0.362		0.362	0.175	mg/Kg	☼	11/29/13 07:58	12/03/13 17:53	10
PCB-1232	<0.362		0.362	0.153	mg/Kg	☼	11/29/13 07:58	12/03/13 17:53	10
PCB-1242	<0.362		0.362	0.142	mg/Kg	☼	11/29/13 07:58	12/03/13 17:53	10
PCB-1248	<0.362		0.362	0.186	mg/Kg	☼	11/29/13 07:58	12/03/13 17:53	10
PCB-1254	<0.362		0.362	0.186	mg/Kg	☼	11/29/13 07:58	12/03/13 17:53	10
PCB-1260	3.24		0.362	0.186	mg/Kg	☼	11/29/13 07:58	12/03/13 17:53	10
PCB-1262	<0.362		0.362	0.296	mg/Kg	☼	11/29/13 07:58	12/03/13 17:53	10
PCB-1268	<0.362		0.362	0.153	mg/Kg	☼	11/29/13 07:58	12/03/13 17:53	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				11/29/13 07:58	12/03/13 17:53	10
Tetrachloro-m-xylene	0	X	30 - 150				11/29/13 07:58	12/03/13 17:53	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-62 (0-0.25)

Lab Sample ID: 480-50846-16

Date Collected: 11/22/13 10:35

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.6

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	213	X	30 - 150	11/29/13 07:58	12/03/13 17:53	10
DCB Decachlorobiphenyl	149		30 - 150	11/29/13 07:58	12/03/13 17:53	10

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.605		0.605	0.242	mg/Kg	☼	11/26/13 10:00	12/01/13 01:32	1
Arsenic	10.2		1.21	0.484	mg/Kg	☼	11/26/13 10:00	12/02/13 17:49	1
Barium	179		0.605	0.133	mg/Kg	☼	11/26/13 10:00	12/01/13 01:32	1
Beryllium	0.477		0.242	0.0339	mg/Kg	☼	11/26/13 10:00	12/01/13 01:32	1
Cadmium	7.89		0.242	0.0363	mg/Kg	☼	11/26/13 10:00	12/01/13 01:32	1
Chromium	17.9		0.605	0.242	mg/Kg	☼	11/26/13 10:00	12/01/13 01:32	1
Nickel	25.7		1.21	0.278	mg/Kg	☼	11/26/13 10:00	12/01/13 01:32	1
Thallium	<1.21		1.21	0.363	mg/Kg	☼	11/26/13 10:00	12/02/13 17:49	1
Vanadium	17.7		0.605	0.133	mg/Kg	☼	11/26/13 10:00	12/01/13 01:32	1
Zinc	895	B	3.02	0.185	mg/Kg	☼	11/26/13 10:00	12/01/13 01:32	1
Lead	662		0.605	0.290	mg/Kg	☼	11/26/13 10:00	12/01/13 01:32	1
Selenium	0.904		0.605	0.484	mg/Kg	☼	11/26/13 10:00	12/02/13 17:49	1
Antimony	5.10	^	0.605	0.484	mg/Kg	☼	11/26/13 10:00	12/02/13 17:49	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.43		0.559	0.0453	mg/Kg	☼	11/29/13 08:40	11/29/13 16:38	5

Client Sample ID: WCSS-63 (0-0.25)

Lab Sample ID: 480-50846-17

Date Collected: 11/22/13 10:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 51.1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1.31		1.31	0.832	mg/Kg	☼	11/29/13 07:58	12/03/13 18:09	20
PCB-1221	<1.31		1.31	0.634	mg/Kg	☼	11/29/13 07:58	12/03/13 18:09	20
PCB-1232	<1.31		1.31	0.555	mg/Kg	☼	11/29/13 07:58	12/03/13 18:09	20
PCB-1242	<1.31		1.31	0.515	mg/Kg	☼	11/29/13 07:58	12/03/13 18:09	20
PCB-1248	<1.31		1.31	0.674	mg/Kg	☼	11/29/13 07:58	12/03/13 18:09	20
PCB-1254	<1.31		1.31	0.674	mg/Kg	☼	11/29/13 07:58	12/03/13 18:09	20
PCB-1260	7.67		1.31	0.674	mg/Kg	☼	11/29/13 07:58	12/03/13 18:09	20
PCB-1262	<1.31		1.31	1.07	mg/Kg	☼	11/29/13 07:58	12/03/13 18:09	20
PCB-1268	<1.31		1.31	0.555	mg/Kg	☼	11/29/13 07:58	12/03/13 18:09	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 07:58	12/03/13 18:09	20
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 07:58	12/03/13 18:09	20
DCB Decachlorobiphenyl	534	X	30 - 150	11/29/13 07:58	12/03/13 18:09	20
DCB Decachlorobiphenyl	226	X	30 - 150	11/29/13 07:58	12/03/13 18:09	20

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.54		1.07	0.429	mg/Kg	☼	11/26/13 10:00	12/01/13 01:34	1
Arsenic	32.0		2.15	0.858	mg/Kg	☼	11/26/13 10:00	12/02/13 17:52	1
Barium	317		1.07	0.236	mg/Kg	☼	11/26/13 10:00	12/01/13 01:34	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-63 (0-0.25)

Lab Sample ID: 480-50846-17

Date Collected: 11/22/13 10:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 51.1

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.433		0.429	0.0601	mg/Kg	☼	11/26/13 10:00	12/01/13 01:34	1
Cadmium	12.4		0.429	0.0644	mg/Kg	☼	11/26/13 10:00	12/01/13 01:34	1
Chromium	61.8		1.07	0.429	mg/Kg	☼	11/26/13 10:00	12/01/13 01:34	1
Nickel	57.4		2.15	0.493	mg/Kg	☼	11/26/13 10:00	12/01/13 01:34	1
Thallium	<2.15		2.15	0.644	mg/Kg	☼	11/26/13 10:00	12/02/13 17:52	1
Vanadium	31.3		1.07	0.236	mg/Kg	☼	11/26/13 10:00	12/01/13 01:34	1
Zinc	4150	B	5.36	0.328	mg/Kg	☼	11/26/13 10:00	12/01/13 01:34	1
Lead	2780		1.07	0.515	mg/Kg	☼	11/26/13 10:00	12/01/13 01:34	1
Selenium	2.28		1.07	0.858	mg/Kg	☼	11/26/13 10:00	12/02/13 17:52	1
Antimony	54.7	^	1.07	0.858	mg/Kg	☼	11/26/13 10:00	12/02/13 17:52	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.799		0.199	0.0161	mg/Kg	☼	11/29/13 08:40	11/29/13 16:02	1

Client Sample ID: WCSS-72(0-0.25)

Lab Sample ID: 480-50846-18

Date Collected: 11/22/13 10:50

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.7

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.576		0.576	0.230	mg/Kg	☼	11/26/13 10:00	12/01/13 01:37	1
Arsenic	3.15		1.15	0.461	mg/Kg	☼	11/26/13 10:00	12/02/13 18:05	1
Barium	29.0		0.576	0.127	mg/Kg	☼	11/26/13 10:00	12/01/13 01:37	1
Beryllium	0.195	J	0.230	0.0322	mg/Kg	☼	11/26/13 10:00	12/01/13 01:37	1
Cadmium	0.315		0.230	0.0345	mg/Kg	☼	11/26/13 10:00	12/01/13 01:37	1
Chromium	7.09		0.576	0.230	mg/Kg	☼	11/26/13 10:00	12/01/13 01:37	1
Nickel	6.10		1.15	0.265	mg/Kg	☼	11/26/13 10:00	12/01/13 01:37	1
Thallium	<1.15		1.15	0.345	mg/Kg	☼	11/26/13 10:00	12/02/13 18:05	1
Vanadium	9.24		0.576	0.127	mg/Kg	☼	11/26/13 10:00	12/01/13 01:37	1
Zinc	50.8	B	2.88	0.176	mg/Kg	☼	11/26/13 10:00	12/01/13 01:37	1
Lead	13.3		0.576	0.276	mg/Kg	☼	11/26/13 10:00	12/01/13 01:37	1
Selenium	<0.576		0.576	0.461	mg/Kg	☼	11/26/13 10:00	12/02/13 18:05	1
Antimony	<0.576	^	0.576	0.461	mg/Kg	☼	11/26/13 10:00	12/02/13 18:05	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0164	J	0.111	0.00896	mg/Kg	☼	11/29/13 08:40	11/29/13 16:04	1

Client Sample ID: WCEB-57 (0-0.25)

Lab Sample ID: 480-50846-19

Date Collected: 11/22/13 11:15

Matrix: Water

Date Received: 11/26/13 02:00

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.242		0.242	0.0967	ug/L		11/29/13 07:49	11/30/13 13:27	1
PCB-1221	<0.242		0.242	0.0967	ug/L		11/29/13 07:49	11/30/13 13:27	1
PCB-1232	<0.242		0.242	0.0967	ug/L		11/29/13 07:49	11/30/13 13:27	1
PCB-1242	<0.242		0.242	0.0967	ug/L		11/29/13 07:49	11/30/13 13:27	1
PCB-1248	<0.242		0.242	0.0967	ug/L		11/29/13 07:49	11/30/13 13:27	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCEB-57 (0-0.25)

Lab Sample ID: 480-50846-19

Date Collected: 11/22/13 11:15

Matrix: Water

Date Received: 11/26/13 02:00

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1254	<0.242		0.242	0.0967	ug/L		11/29/13 07:49	11/30/13 13:27	1
PCB-1260	<0.242		0.242	0.0967	ug/L		11/29/13 07:49	11/30/13 13:27	1
PCB-1262	<0.242		0.242	0.0967	ug/L		11/29/13 07:49	11/30/13 13:27	1
PCB-1268	<0.242		0.242	0.0967	ug/L		11/29/13 07:49	11/30/13 13:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	93		30 - 150				11/29/13 07:49	11/30/13 13:27	1
DCB Decachlorobiphenyl	66		30 - 150				11/29/13 07:49	11/30/13 13:27	1

Client Sample ID: TB-11222013 (1)

Lab Sample ID: 480-50846-20

Date Collected: 11/22/13 12:00

Matrix: Solid

Date Received: 11/26/13 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.139		0.139	0.0278	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,1,1-Trichloroethane	<0.139		0.139	0.0202	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,1,2,2-Tetrachloroethane	<0.139		0.139	0.0451	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,1,2-Trichloroethane	<0.139		0.139	0.0361	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,1-Dichloroethane	<0.139		0.139	0.0339	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,1-Dichloroethene	<0.139		0.139	0.0340	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,1-Dichloropropene	<0.139		0.139	0.0394	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,2,3-Trichlorobenzene	<0.139		0.139	0.0295	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,2,3-Trichloropropane	<0.139		0.139	0.0283	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,2,4-Trichlorobenzene	<0.139		0.139	0.0169	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,2,4-Trimethylbenzene	<0.139		0.139	0.0533	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,2-Dibromo-3-Chloropropane	<1.39		1.39	0.139	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,2-Dichlorobenzene	<0.139		0.139	0.0217	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,2-Dichloroethane	<0.139		0.139	0.0139	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,2-Dichloropropane	<0.139		0.139	0.139	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,3,5-Trimethylbenzene	<0.139		0.139	0.0179	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,3-Dichlorobenzene	<0.139		0.139	0.0143	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,3-Dichloropropane	<0.139		0.139	0.0167	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,4-Dichlorobenzene	<0.139		0.139	0.0389	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
1,4-Dioxane	<13.9		13.9	1.34	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
2,2-Dichloropropane	<0.139		0.139	0.0472	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
2-Butanone (MEK)	<1.39	*	1.39	0.102	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
2-Chlorotoluene	<0.139		0.139	0.0182	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
2-Hexanone	<1.39		1.39	0.139	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
4-Chlorotoluene	<0.139		0.139	0.0328	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
4-Isopropyltoluene	<0.139		0.139	0.0223	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
4-Methyl-2-pentanone (MIBK)	<1.39		1.39	0.0911	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Acetone	<13.9		13.9	0.234	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Benzene	<0.139		0.139	0.0136	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Bromobenzene	<0.139		0.139	0.0489	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Bromoform	<0.139		0.139	0.139	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Bromomethane	<0.278		0.278	0.0250	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Carbon disulfide	<0.139		0.139	0.139	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Carbon tetrachloride	<0.139		0.139	0.0269	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Chlorobenzene	<0.139		0.139	0.0367	mg/Kg		11/26/13 10:30	11/26/13 16:22	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: TB-11222013 (1)

Lab Sample ID: 480-50846-20

Date Collected: 11/22/13 12:00

Matrix: Solid

Date Received: 11/26/13 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobromomethane	<0.139		0.139	0.0201	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Chlorodibromomethane	<0.139		0.139	0.0356	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Chloroethane	<0.278		0.278	0.0628	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Chloroform	<0.139		0.139	0.0172	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Chloromethane	<0.278		0.278	0.0168	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
cis-1,2-Dichloroethene	<0.139		0.139	0.0356	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
cis-1,3-Dichloropropene	<0.139		0.139	0.0400	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Dichlorobromomethane	<0.139		0.139	0.0372	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Dichlorodifluoromethane	<0.278		0.278	0.0229	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Ethyl ether	<0.139		0.139	0.117	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Ethylbenzene	<0.139		0.139	0.0192	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Ethylene Dibromide	<0.139		0.139	0.0357	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Hexachlorobutadiene	<0.139		0.139	0.0326	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Isopropyl ether	<0.139		0.139	0.139	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Isopropylbenzene	<0.139		0.139	0.0419	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Methyl tert-butyl ether	<0.139		0.139	0.0273	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Methylene Chloride	<0.139		0.139	0.128	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
m-Xylene & p-Xylene	<0.278		0.278	0.0467	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Naphthalene	<1.39		1.39	0.0372	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
n-Butylbenzene	<0.139		0.139	0.0242	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
N-Propylbenzene	<0.139		0.139	0.0222	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
o-Xylene	<0.139		0.139	0.0363	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
sec-Butylbenzene	<0.139		0.139	0.0242	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Styrene	<0.139		0.139	0.0139	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Tert-amyl methyl ether	<0.139		0.139	0.0711	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Tert-butyl ethyl ether	<0.139		0.139	0.122	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
tert-Butylbenzene	<0.139		0.139	0.0289	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Tetrachloroethene	<0.139		0.139	0.0373	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Tetrahydrofuran	<2.78		2.78	0.256	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Toluene	<0.139		0.139	0.0210	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
trans-1,2-Dichloroethene	<0.139		0.139	0.0287	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
trans-1,3-Dichloropropene	<0.139		0.139	0.122	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Trichloroethene	<0.139		0.139	0.0611	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Trichlorofluoromethane	<0.278		0.278	0.0263	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Vinyl chloride	<0.139		0.139	0.0339	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Dibromomethane	<0.139		0.139	0.0286	mg/Kg		11/26/13 10:30	11/26/13 16:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130				11/26/13 10:30	11/26/13 16:22	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 130				11/26/13 10:30	11/26/13 16:22	1
4-Bromofluorobenzene (Surr)	94		70 - 130				11/26/13 10:30	11/26/13 16:22	1

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (70-130)	12DCE (70-130)	BFB (70-130)
480-50846-13	WCSS-56 (0-0.25)	101	107	96
480-50846-14	WCSS-55 (0-0.25)	97	103	96
480-50846-15	WCSS-57 (0-0.25)	98	103	99
480-50846-20	TB-11222013 (1)	96	96	94
LCS 480-154424/4	Lab Control Sample	97	101	99
LCSD 480-154424/5	Lab Control Sample Dup	96	98	99
MB 480-154424/6	Method Blank	96	97	95

Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (30-150)	TCX2 (30-150)	DCB1 (30-150)	DCB2 (30-150)
480-50846-1	WCSS-61 (0-0.25)	77	73	76	65
480-50846-2	WCSS-47 (0-0.25)	117	94	297 X	78
480-50846-3	WCSS-60 (0-0.25)	81	83	117	77
480-50846-4	WCSS-59 (0-0.25)	33	31	30	24 X
480-50846-5	WCSS-54 (0-0.25)	67	63	0 X	0 X
480-50846-6	WCSS-53 (0-0.25)	72	65	0 X	0 X
480-50846-7	WCSS-52 (0-0.25)	0 X	0 X	0 X	0 X
480-50846-8	WCSS-51 (0-0.25)	0 X	0 X	0 X	0 X
480-50846-9	WCSS-49 (0-0.25)	0 X	0 X	0 X	0 X
480-50846-11	WCSS-58 (0-0.25)	75	74	103	74
480-50846-12	WCSS-958 (0-0.25)	69	70	111	66
480-50846-15	WCSS-57 (0-0.25)	46	44	79	38
480-50846-16	WCSS-62 (0-0.25)	0 X	0 X	213 X	149
480-50846-17	WCSS-63 (0-0.25)	0 X	0 X	534 X	226 X
LCS 240-111692/24-A	Lab Control Sample	82	109	88	78
LCS 240-112062/24-A	Lab Control Sample	98	96	80	86
LCSD 240-111692/25-A	Lab Control Sample Dup	89	114	75	67
LCSD 240-112062/25-A	Lab Control Sample Dup	83	76	86	78
MB 240-111692/23-A	Method Blank	76	85	80	82
MB 240-112062/23-A	Method Blank	65	66	96	85

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	TCX2 (30-150)	DCB2 (30-150)		
480-50846-19	WCEB-57 (0-0.25)	93	66		
LCS 480-154839/2-A	Lab Control Sample	84	74		
LCSD 480-154839/3-A	Lab Control Sample Dup	90	52		
MB 480-154839/1-A	Method Blank	92	72		
Surrogate Legend					
TCX = Tetrachloro-m-xylene					
DCB = DCB Decachlorobiphenyl					

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	1COD2 (40-140)	2BN1 (40-140)	FBP1 (40-140)	OTPH1 (40-140)
480-50846-15	WCSS-57 (0-0.25)	41	71	89	37 X
LCS 480-154450/2-B	Lab Control Sample	74	66	83	68
LCSD 480-154450/3-B	Lab Control Sample Dup	72	74	89	66
MB 480-154450/1-B	Method Blank	80	82	96	75
Surrogate Legend					
1COD = 1-Chlorooctadecane					
2BN = 2-Bromonaphthalene					
FBP = 2-Fluorobiphenyl					
OTPH = o-Terphenyl					

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-154424/6

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00250		0.00250	0.000500	mg/Kg			11/26/13 12:23	1
1,1,1-Trichloroethane	<0.00250		0.00250	0.000363	mg/Kg			11/26/13 12:23	1
1,1,2,2-Tetrachloroethane	<0.00250		0.00250	0.000811	mg/Kg			11/26/13 12:23	1
1,1,2-Trichloroethane	<0.00250		0.00250	0.000650	mg/Kg			11/26/13 12:23	1
1,1-Dichloroethane	<0.00250		0.00250	0.000610	mg/Kg			11/26/13 12:23	1
1,1-Dichloroethene	<0.00250		0.00250	0.000612	mg/Kg			11/26/13 12:23	1
1,1-Dichloropropene	<0.00250		0.00250	0.000710	mg/Kg			11/26/13 12:23	1
1,2,3-Trichlorobenzene	<0.00250		0.00250	0.000531	mg/Kg			11/26/13 12:23	1
1,2,3-Trichloropropane	<0.00250		0.00250	0.000509	mg/Kg			11/26/13 12:23	1
1,2,4-Trichlorobenzene	<0.00250		0.00250	0.000304	mg/Kg			11/26/13 12:23	1
1,2,4-Trimethylbenzene	<0.00250		0.00250	0.000960	mg/Kg			11/26/13 12:23	1
1,2-Dibromo-3-Chloropropane	<0.0250		0.0250	0.00250	mg/Kg			11/26/13 12:23	1
1,2-Dichlorobenzene	<0.00250		0.00250	0.000391	mg/Kg			11/26/13 12:23	1
1,2-Dichloroethane	<0.00250		0.00250	0.000251	mg/Kg			11/26/13 12:23	1
1,2-Dichloropropane	<0.00250		0.00250	0.00250	mg/Kg			11/26/13 12:23	1
1,3,5-Trimethylbenzene	<0.00250		0.00250	0.000322	mg/Kg			11/26/13 12:23	1
1,3-Dichlorobenzene	<0.00250		0.00250	0.000257	mg/Kg			11/26/13 12:23	1
1,3-Dichloropropane	<0.00250		0.00250	0.000300	mg/Kg			11/26/13 12:23	1
1,4-Dichlorobenzene	<0.00250		0.00250	0.000700	mg/Kg			11/26/13 12:23	1
1,4-Dioxane	<0.250		0.250	0.0241	mg/Kg			11/26/13 12:23	1
2,2-Dichloropropane	<0.00250		0.00250	0.000850	mg/Kg			11/26/13 12:23	1
2-Butanone (MEK)	<0.0250		0.0250	0.00183	mg/Kg			11/26/13 12:23	1
2-Chlorotoluene	<0.00250		0.00250	0.000328	mg/Kg			11/26/13 12:23	1
2-Hexanone	<0.0250		0.0250	0.00250	mg/Kg			11/26/13 12:23	1
4-Chlorotoluene	<0.00250		0.00250	0.000590	mg/Kg			11/26/13 12:23	1
4-Isopropyltoluene	<0.00250		0.00250	0.000401	mg/Kg			11/26/13 12:23	1
4-Methyl-2-pentanone (MIBK)	<0.0250		0.0250	0.00164	mg/Kg			11/26/13 12:23	1
Acetone	<0.250		0.250	0.00421	mg/Kg			11/26/13 12:23	1
Benzene	<0.00250		0.00250	0.000245	mg/Kg			11/26/13 12:23	1
Bromobenzene	<0.00250		0.00250	0.000880	mg/Kg			11/26/13 12:23	1
Bromoform	<0.00250		0.00250	0.00250	mg/Kg			11/26/13 12:23	1
Bromomethane	<0.00500		0.00500	0.000450	mg/Kg			11/26/13 12:23	1
Carbon disulfide	<0.00250		0.00250	0.00250	mg/Kg			11/26/13 12:23	1
Carbon tetrachloride	<0.00250		0.00250	0.000484	mg/Kg			11/26/13 12:23	1
Chlorobenzene	<0.00250		0.00250	0.000660	mg/Kg			11/26/13 12:23	1
Chlorobromomethane	<0.00250		0.00250	0.000361	mg/Kg			11/26/13 12:23	1
Chlorodibromomethane	<0.00250		0.00250	0.000640	mg/Kg			11/26/13 12:23	1
Chloroethane	<0.00500		0.00500	0.00113	mg/Kg			11/26/13 12:23	1
Chloroform	<0.00250		0.00250	0.000309	mg/Kg			11/26/13 12:23	1
Chloromethane	<0.00500		0.00500	0.000302	mg/Kg			11/26/13 12:23	1
cis-1,2-Dichloroethene	<0.00250		0.00250	0.000640	mg/Kg			11/26/13 12:23	1
cis-1,3-Dichloropropene	<0.00250		0.00250	0.000720	mg/Kg			11/26/13 12:23	1
Dichlorobromomethane	<0.00250		0.00250	0.000670	mg/Kg			11/26/13 12:23	1
Dichlorodifluoromethane	<0.00500		0.00500	0.000413	mg/Kg			11/26/13 12:23	1
Ethyl ether	<0.00250		0.00250	0.00210	mg/Kg			11/26/13 12:23	1
Ethylbenzene	<0.00250		0.00250	0.000345	mg/Kg			11/26/13 12:23	1
Ethylene Dibromide	<0.00250		0.00250	0.000642	mg/Kg			11/26/13 12:23	1
Hexachlorobutadiene	<0.00250		0.00250	0.000586	mg/Kg			11/26/13 12:23	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-154424/6

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.00250		0.00250	0.00250	mg/Kg			11/26/13 12:23	1
Isopropylbenzene	<0.00250		0.00250	0.000754	mg/Kg			11/26/13 12:23	1
Methyl tert-butyl ether	<0.00250		0.00250	0.000491	mg/Kg			11/26/13 12:23	1
Methylene Chloride	<0.00250		0.00250	0.00230	mg/Kg			11/26/13 12:23	1
m-Xylene & p-Xylene	<0.00500		0.00500	0.000840	mg/Kg			11/26/13 12:23	1
Naphthalene	<0.0250		0.0250	0.000670	mg/Kg			11/26/13 12:23	1
n-Butylbenzene	<0.00250		0.00250	0.000435	mg/Kg			11/26/13 12:23	1
N-Propylbenzene	<0.00250		0.00250	0.000400	mg/Kg			11/26/13 12:23	1
o-Xylene	<0.00250		0.00250	0.000653	mg/Kg			11/26/13 12:23	1
sec-Butylbenzene	<0.00250		0.00250	0.000435	mg/Kg			11/26/13 12:23	1
Styrene	<0.00250		0.00250	0.000250	mg/Kg			11/26/13 12:23	1
Tert-amyl methyl ether	<0.00250		0.00250	0.00128	mg/Kg			11/26/13 12:23	1
Tert-butyl ethyl ether	<0.00250		0.00250	0.00220	mg/Kg			11/26/13 12:23	1
tert-Butylbenzene	<0.00250		0.00250	0.000520	mg/Kg			11/26/13 12:23	1
Tetrachloroethene	<0.00250		0.00250	0.000671	mg/Kg			11/26/13 12:23	1
Tetrahydrofuran	<0.0500		0.0500	0.00460	mg/Kg			11/26/13 12:23	1
Toluene	<0.00250		0.00250	0.000378	mg/Kg			11/26/13 12:23	1
trans-1,2-Dichloroethene	<0.00250		0.00250	0.000516	mg/Kg			11/26/13 12:23	1
trans-1,3-Dichloropropene	<0.00250		0.00250	0.00220	mg/Kg			11/26/13 12:23	1
Trichloroethene	<0.00250		0.00250	0.00110	mg/Kg			11/26/13 12:23	1
Trichlorofluoromethane	<0.00500		0.00500	0.000473	mg/Kg			11/26/13 12:23	1
Vinyl chloride	<0.00250		0.00250	0.000610	mg/Kg			11/26/13 12:23	1
Dibromomethane	<0.00250		0.00250	0.000515	mg/Kg			11/26/13 12:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130		11/26/13 12:23	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130		11/26/13 12:23	1
4-Bromofluorobenzene (Surr)	95		70 - 130		11/26/13 12:23	1

Lab Sample ID: LCS 480-154424/4

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0500	0.04851		mg/Kg		97	70 - 130
1,1,1-Trichloroethane	0.0500	0.04533		mg/Kg		91	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.05319		mg/Kg		106	70 - 130
1,1,2-Trichloroethane	0.0500	0.05063		mg/Kg		101	70 - 130
1,1-Dichloroethane	0.0500	0.04964		mg/Kg		99	70 - 130
1,1-Dichloroethene	0.0500	0.04300		mg/Kg		86	70 - 130
1,1-Dichloropropene	0.0500	0.04672		mg/Kg		93	70 - 130
1,2,3-Trichlorobenzene	0.0500	0.04910		mg/Kg		98	70 - 130
1,2,3-Trichloropropane	0.0500	0.05322		mg/Kg		106	70 - 130
1,2,4-Trichlorobenzene	0.0500	0.04887		mg/Kg		98	70 - 130
1,2,4-Trimethylbenzene	0.0500	0.04478		mg/Kg		90	70 - 130
1,2-Dibromo-3-Chloropropane	0.0500	0.04950		mg/Kg		99	70 - 130
1,2-Dichlorobenzene	0.0500	0.04828		mg/Kg		97	70 - 130
1,2-Dichloroethane	0.0500	0.05049		mg/Kg		101	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-154424/4

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.0500	0.05015		mg/Kg		100	70 - 130
1,3,5-Trimethylbenzene	0.0500	0.04715		mg/Kg		94	70 - 130
1,3-Dichlorobenzene	0.0500	0.04811		mg/Kg		96	70 - 130
1,3-Dichloropropane	0.0500	0.05066		mg/Kg		101	70 - 130
1,4-Dichlorobenzene	0.0500	0.04748		mg/Kg		95	70 - 130
1,4-Dioxane	2.00	2.132		mg/Kg		107	70 - 130
2,2-Dichloropropane	0.0500	0.04338		mg/Kg		87	70 - 130
2-Butanone (MEK)	0.250	0.3491	*	mg/Kg		140	70 - 130
2-Chlorotoluene	0.0500	0.04868		mg/Kg		97	70 - 130
2-Hexanone	0.250	0.2541		mg/Kg		102	70 - 130
4-Chlorotoluene	0.0500	0.05181		mg/Kg		104	70 - 130
4-Isopropyltoluene	0.0500	0.04715		mg/Kg		94	70 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2530		mg/Kg		101	70 - 130
Acetone	0.250	0.3183		mg/Kg		127	70 - 130
Benzene	0.0500	0.04700		mg/Kg		94	70 - 130
Bromobenzene	0.0500	0.04857		mg/Kg		97	70 - 130
Bromoform	0.0500	0.04492		mg/Kg		90	70 - 130
Bromomethane	0.0500	0.05282		mg/Kg		106	70 - 130
Carbon disulfide	0.0500	0.04742		mg/Kg		95	70 - 130
Carbon tetrachloride	0.0500	0.04396		mg/Kg		88	70 - 130
Chlorobenzene	0.0500	0.04769		mg/Kg		95	70 - 130
Chlorobromomethane	0.0500	0.04956		mg/Kg		99	70 - 130
Chlorodibromomethane	0.0500	0.05177		mg/Kg		104	70 - 130
Chloroethane	0.0500	0.05357		mg/Kg		107	70 - 130
Chloroform	0.0500	0.04852		mg/Kg		97	70 - 130
Chloromethane	0.0500	0.04453		mg/Kg		89	70 - 130
cis-1,2-Dichloroethene	0.0500	0.04864		mg/Kg		97	70 - 130
cis-1,3-Dichloropropene	0.0500	0.05167		mg/Kg		103	70 - 130
Dichlorobromomethane	0.0500	0.05078		mg/Kg		102	70 - 130
Dichlorodifluoromethane	0.100	0.07825		mg/Kg		78	70 - 130
Ethyl ether	0.0500	0.04833		mg/Kg		97	70 - 130
Ethylbenzene	0.0500	0.04467		mg/Kg		89	70 - 130
Ethylene Dibromide	0.0500	0.05053		mg/Kg		101	70 - 130
Hexachlorobutadiene	0.0500	0.04666		mg/Kg		93	70 - 130
Isopropyl ether	0.0500	0.05011		mg/Kg		100	70 - 130
Isopropylbenzene	0.0500	0.04760		mg/Kg		95	70 - 130
Methyl tert-butyl ether	0.0500	0.04572		mg/Kg		91	70 - 130
Methylene Chloride	0.0500	0.04628		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.100	0.08631		mg/Kg		86	70 - 130
Naphthalene	0.0500	0.04613		mg/Kg		92	70 - 130
n-Butylbenzene	0.0500	0.04728		mg/Kg		95	70 - 130
N-Propylbenzene	0.0500	0.04776		mg/Kg		96	70 - 130
o-Xylene	0.0500	0.04500		mg/Kg		90	70 - 130
sec-Butylbenzene	0.0500	0.04716		mg/Kg		94	70 - 130
Styrene	0.0500	0.04809		mg/Kg		96	70 - 130
Tert-amyl methyl ether	0.0500	0.04947		mg/Kg		99	70 - 130
Tert-butyl ethyl ether	0.0500	0.04840		mg/Kg		97	70 - 130
tert-Butylbenzene	0.0500	0.04632		mg/Kg		93	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-154424/4

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	0.0500	0.04785		mg/Kg		96	70 - 130
Tetrahydrofuran	0.250	0.2532		mg/Kg		101	70 - 130
Toluene	0.0500	0.04169		mg/Kg		83	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04601		mg/Kg		92	70 - 130
trans-1,3-Dichloropropene	0.0500	0.04985		mg/Kg		100	70 - 130
Trichloroethene	0.0500	0.04717		mg/Kg		94	70 - 130
Trichlorofluoromethane	0.0500	0.05005		mg/Kg		100	70 - 130
Vinyl chloride	0.0500	0.04613		mg/Kg		92	70 - 130
Dibromomethane	0.0500	0.05134		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	97		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 480-154424/5

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0500	0.04910		mg/Kg		98	70 - 130	1	20
1,1,1-Trichloroethane	0.0500	0.04672		mg/Kg		93	70 - 130	3	20
1,1,2,2-Tetrachloroethane	0.0500	0.05031		mg/Kg		101	70 - 130	6	20
1,1,2-Trichloroethane	0.0500	0.04980		mg/Kg		100	70 - 130	2	20
1,1-Dichloroethane	0.0500	0.04976		mg/Kg		100	70 - 130	0	20
1,1-Dichloroethene	0.0500	0.04422		mg/Kg		88	70 - 130	3	20
1,1-Dichloropropene	0.0500	0.04716		mg/Kg		94	70 - 130	1	20
1,2,3-Trichlorobenzene	0.0500	0.05078		mg/Kg		102	70 - 130	3	20
1,2,3-Trichloropropane	0.0500	0.05121		mg/Kg		102	70 - 130	4	20
1,2,4-Trichlorobenzene	0.0500	0.05005		mg/Kg		100	70 - 130	2	20
1,2,4-Trimethylbenzene	0.0500	0.04461		mg/Kg		89	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	0.0500	0.04624		mg/Kg		92	70 - 130	7	20
1,2-Dichlorobenzene	0.0500	0.04889		mg/Kg		98	70 - 130	1	20
1,2-Dichloroethane	0.0500	0.05019		mg/Kg		100	70 - 130	1	20
1,2-Dichloropropane	0.0500	0.05061		mg/Kg		101	70 - 130	1	20
1,3,5-Trimethylbenzene	0.0500	0.04712		mg/Kg		94	70 - 130	0	20
1,3-Dichlorobenzene	0.0500	0.04839		mg/Kg		97	70 - 130	1	20
1,3-Dichloropropane	0.0500	0.04949		mg/Kg		99	70 - 130	2	20
1,4-Dichlorobenzene	0.0500	0.04779		mg/Kg		96	70 - 130	1	20
1,4-Dioxane	2.00	1.948		mg/Kg		97	70 - 130	9	20
2,2-Dichloropropane	0.0500	0.04442		mg/Kg		89	70 - 130	2	20
2-Butanone (MEK)	0.250	0.3239		mg/Kg		130	70 - 130	7	20
2-Chlorotoluene	0.0500	0.04863		mg/Kg		97	70 - 130	0	20
2-Hexanone	0.250	0.2355		mg/Kg		94	70 - 130	8	20
4-Chlorotoluene	0.0500	0.05166		mg/Kg		103	70 - 130	0	20
4-Isopropyltoluene	0.0500	0.04821		mg/Kg		96	70 - 130	2	20
4-Methyl-2-pentanone (MIBK)	0.250	0.2372		mg/Kg		95	70 - 130	6	20
Acetone	0.250	0.2943		mg/Kg		118	70 - 130	8	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-154424/5

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04758		mg/Kg		95	70 - 130	1	20
Bromobenzene	0.0500	0.04871		mg/Kg		97	70 - 130	0	20
Bromoform	0.0500	0.04370		mg/Kg		87	70 - 130	3	20
Bromomethane	0.0500	0.05350		mg/Kg		107	70 - 130	1	20
Carbon disulfide	0.0500	0.04820		mg/Kg		96	70 - 130	2	20
Carbon tetrachloride	0.0500	0.04559		mg/Kg		91	70 - 130	4	20
Chlorobenzene	0.0500	0.04765		mg/Kg		95	70 - 130	0	20
Chlorobromomethane	0.0500	0.04930		mg/Kg		99	70 - 130	1	20
Chlorodibromomethane	0.0500	0.05077		mg/Kg		102	70 - 130	2	20
Chloroethane	0.0500	0.05694		mg/Kg		114	70 - 130	6	20
Chloroform	0.0500	0.04878		mg/Kg		98	70 - 130	1	20
Chloromethane	0.0500	0.04581		mg/Kg		92	70 - 130	3	20
cis-1,2-Dichloroethene	0.0500	0.04872		mg/Kg		97	70 - 130	0	20
cis-1,3-Dichloropropene	0.0500	0.05158		mg/Kg		103	70 - 130	0	20
Dichlorobromomethane	0.0500	0.05082		mg/Kg		102	70 - 130	0	20
Dichlorodifluoromethane	0.100	0.07868		mg/Kg		79	70 - 130	1	20
Ethyl ether	0.0500	0.04878		mg/Kg		98	70 - 130	1	20
Ethylbenzene	0.0500	0.04503		mg/Kg		90	70 - 130	1	20
Ethylene Dibromide	0.0500	0.04894		mg/Kg		98	70 - 130	3	20
Hexachlorobutadiene	0.0500	0.04891		mg/Kg		98	70 - 130	5	20
Isopropyl ether	0.0500	0.05004		mg/Kg		100	70 - 130	0	20
Isopropylbenzene	0.0500	0.04787		mg/Kg		96	70 - 130	1	20
Methyl tert-butyl ether	0.0500	0.04521		mg/Kg		90	70 - 130	1	20
Methylene Chloride	0.0500	0.04657		mg/Kg		93	70 - 130	1	20
m-Xylene & p-Xylene	0.100	0.08640		mg/Kg		86	70 - 130	0	20
Naphthalene	0.0500	0.04727		mg/Kg		95	70 - 130	2	20
n-Butylbenzene	0.0500	0.04843		mg/Kg		97	70 - 130	2	20
N-Propylbenzene	0.0500	0.04773		mg/Kg		95	70 - 130	0	20
o-Xylene	0.0500	0.04518		mg/Kg		90	70 - 130	0	20
sec-Butylbenzene	0.0500	0.04803		mg/Kg		96	70 - 130	2	20
Styrene	0.0500	0.04827		mg/Kg		97	70 - 130	0	20
Tert-amyl methyl ether	0.0500	0.04940		mg/Kg		99	70 - 130	0	20
Tert-butyl ethyl ether	0.0500	0.04886		mg/Kg		98	70 - 130	1	20
tert-Butylbenzene	0.0500	0.04751		mg/Kg		95	70 - 130	3	20
Tetrachloroethene	0.0500	0.04882		mg/Kg		98	70 - 130	2	20
Tetrahydrofuran	0.250	0.2371		mg/Kg		95	70 - 130	7	20
Toluene	0.0500	0.04167		mg/Kg		83	70 - 130	0	20
trans-1,2-Dichloroethene	0.0500	0.04679		mg/Kg		94	70 - 130	2	20
trans-1,3-Dichloropropene	0.0500	0.04882		mg/Kg		98	70 - 130	2	20
Trichloroethene	0.0500	0.04768		mg/Kg		95	70 - 130	1	20
Trichlorofluoromethane	0.0500	0.05123		mg/Kg		102	70 - 130	2	20
Vinyl chloride	0.0500	0.04745		mg/Kg		95	70 - 130	3	20
Dibromomethane	0.0500	0.05059		mg/Kg		101	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	96		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Lab Sample ID: MB 240-111692/23-A

Matrix: Solid

Analysis Batch: 112330

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 111692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0330		0.0330	0.0210	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1221	<0.0330		0.0330	0.0160	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1232	<0.0330		0.0330	0.0140	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1242	<0.0330		0.0330	0.0130	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1248	<0.0330		0.0330	0.0170	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1254	<0.0330		0.0330	0.0170	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1260	<0.0330		0.0330	0.0170	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1262	<0.0330		0.0330	0.0270	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1268	<0.0330		0.0330	0.0140	mg/Kg		11/29/13 07:58	12/05/13 13:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		30 - 150	11/29/13 07:58	12/05/13 13:13	1
Tetrachloro-m-xylene	85		30 - 150	11/29/13 07:58	12/05/13 13:13	1
DCB Decachlorobiphenyl	80		30 - 150	11/29/13 07:58	12/05/13 13:13	1
DCB Decachlorobiphenyl	82		30 - 150	11/29/13 07:58	12/05/13 13:13	1

Lab Sample ID: LCS 240-111692/24-A

Matrix: Solid

Analysis Batch: 112117

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 111692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.333	0.2876		mg/Kg		86	40 - 140
PCB-1260	0.333	0.2978		mg/Kg		89	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	82		30 - 150
Tetrachloro-m-xylene	109		30 - 150
DCB Decachlorobiphenyl	88		30 - 150
DCB Decachlorobiphenyl	78		30 - 150

Lab Sample ID: LCSD 240-111692/25-A

Matrix: Solid

Analysis Batch: 112117

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 111692

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.333	0.2963		mg/Kg		89	40 - 140	3	30
PCB-1260	0.333	0.2912		mg/Kg		87	40 - 140	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	89		30 - 150
Tetrachloro-m-xylene	114		30 - 150
DCB Decachlorobiphenyl	75		30 - 150
DCB Decachlorobiphenyl	67		30 - 150

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: MB 240-112062/23-A

Matrix: Solid

Analysis Batch: 112688

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 112062

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0330		0.0330	0.0210	mg/Kg		12/03/13 10:08	12/07/13 10:47	1
PCB-1221	<0.0330		0.0330	0.0160	mg/Kg		12/03/13 10:08	12/07/13 10:47	1
PCB-1232	<0.0330		0.0330	0.0140	mg/Kg		12/03/13 10:08	12/07/13 10:47	1
PCB-1242	<0.0330		0.0330	0.0130	mg/Kg		12/03/13 10:08	12/07/13 10:47	1
PCB-1248	<0.0330		0.0330	0.0170	mg/Kg		12/03/13 10:08	12/07/13 10:47	1
PCB-1254	<0.0330		0.0330	0.0170	mg/Kg		12/03/13 10:08	12/07/13 10:47	1
PCB-1260	<0.0330		0.0330	0.0170	mg/Kg		12/03/13 10:08	12/07/13 10:47	1
PCB-1262	<0.0330		0.0330	0.0270	mg/Kg		12/03/13 10:08	12/07/13 10:47	1
PCB-1268	<0.0330		0.0330	0.0140	mg/Kg		12/03/13 10:08	12/07/13 10:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	65		30 - 150	12/03/13 10:08	12/07/13 10:47	1
Tetrachloro-m-xylene	66		30 - 150	12/03/13 10:08	12/07/13 10:47	1
DCB Decachlorobiphenyl	96		30 - 150	12/03/13 10:08	12/07/13 10:47	1
DCB Decachlorobiphenyl	85		30 - 150	12/03/13 10:08	12/07/13 10:47	1

Lab Sample ID: LCS 240-112062/24-A

Matrix: Solid

Analysis Batch: 112688

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 112062

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.333	0.3152		mg/Kg		95	40 - 140
PCB-1260	0.333	0.3086		mg/Kg		93	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	98		30 - 150
Tetrachloro-m-xylene	96		30 - 150
DCB Decachlorobiphenyl	80		30 - 150
DCB Decachlorobiphenyl	86		30 - 150

Lab Sample ID: LCSD 240-112062/25-A

Matrix: Solid

Analysis Batch: 112688

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 112062

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.333	0.2995		mg/Kg		90	40 - 140	5	30
PCB-1260	0.333	0.3041		mg/Kg		91	40 - 140	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	83		30 - 150
Tetrachloro-m-xylene	76		30 - 150
DCB Decachlorobiphenyl	86		30 - 150
DCB Decachlorobiphenyl	78		30 - 150

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: MB 480-154839/1-A

Matrix: Water

Analysis Batch: 154990

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154839

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.250		0.250	0.100	ug/L		11/29/13 07:49	11/30/13 12:42	1
PCB-1221	<0.250		0.250	0.100	ug/L		11/29/13 07:49	11/30/13 12:42	1
PCB-1232	<0.250		0.250	0.100	ug/L		11/29/13 07:49	11/30/13 12:42	1
PCB-1242	<0.250		0.250	0.100	ug/L		11/29/13 07:49	11/30/13 12:42	1
PCB-1248	<0.250		0.250	0.100	ug/L		11/29/13 07:49	11/30/13 12:42	1
PCB-1254	<0.250		0.250	0.100	ug/L		11/29/13 07:49	11/30/13 12:42	1
PCB-1260	<0.250		0.250	0.100	ug/L		11/29/13 07:49	11/30/13 12:42	1
PCB-1262	<0.250		0.250	0.100	ug/L		11/29/13 07:49	11/30/13 12:42	1
PCB-1268	<0.250		0.250	0.100	ug/L		11/29/13 07:49	11/30/13 12:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	92		30 - 150	11/29/13 07:49	11/30/13 12:42	1
DCB Decachlorobiphenyl	72		30 - 150	11/29/13 07:49	11/30/13 12:42	1

Lab Sample ID: LCS 480-154839/2-A

Matrix: Water

Analysis Batch: 154990

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154839

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.568		ug/L		89	40 - 140
PCB-1260	4.00	3.686		ug/L		92	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	84		30 - 150
DCB Decachlorobiphenyl	74		30 - 150

Lab Sample ID: LCSD 480-154839/3-A

Matrix: Water

Analysis Batch: 154990

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154839

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	4.00	3.764		ug/L		94	40 - 140	5	20
PCB-1260	4.00	3.614		ug/L		90	40 - 140	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	90		30 - 150
DCB Decachlorobiphenyl	52		30 - 150

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 480-154450/1-B

Matrix: Solid

Analysis Batch: 154895

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154450

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.486		0.486	0.0788	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Acenaphthylene	<0.486		0.486	0.0875	mg/Kg		11/26/13 10:37	11/29/13 14:54	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: MB 480-154450/1-B

Matrix: Solid

Analysis Batch: 154895

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154450

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	<0.486		0.486	0.0924	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Benzo[a]anthracene	<0.486		0.486	0.0739	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Benzo[a]pyrene	<0.486		0.486	0.0700	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Benzo[b]fluoranthene	<0.486		0.486	0.0691	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Benzo[g,h,i]perylene	<0.486		0.486	0.0827	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Benzo[k]fluoranthene	<0.486		0.486	0.0710	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
2-Methylnaphthalene	<0.486		0.486	0.0953	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Chrysene	<0.486		0.486	0.0866	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Dibenz(a,h)anthracene	0.1989	J	0.486	0.0681	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Fluoranthene	<0.486		0.486	0.0856	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Fluorene	<0.486		0.486	0.0973	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Indeno[1,2,3-cd]pyrene	0.2347	J	0.486	0.0710	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Naphthalene	<0.486		0.486	0.0817	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Phenanthrene	<0.486		0.486	0.0973	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Pyrene	<0.486		0.486	0.0885	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
C11-C22 Aromatics (unadjusted)	<4.86		4.86	1.95	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
C19-C36 Aliphatics	<4.86		4.86	1.95	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
C9-C18 Aliphatics	<4.86		4.86	1.95	mg/Kg		11/26/13 10:37	11/29/13 14:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	80		40 - 140	11/26/13 10:37	11/29/13 14:54	1
2-Bromonaphthalene	82		40 - 140	11/26/13 10:37	11/29/13 14:54	1
2-Fluorobiphenyl	96		40 - 140	11/26/13 10:37	11/29/13 14:54	1
o-Terphenyl	75		40 - 140	11/26/13 10:37	11/29/13 14:54	1

Lab Sample ID: LCS 480-154450/2-B

Matrix: Solid

Analysis Batch: 154895

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154450

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	4.77	2.562		mg/Kg		54	40 - 140
Acenaphthylene	4.77	2.798		mg/Kg		59	40 - 140
Anthracene	4.77	3.465		mg/Kg		73	40 - 140
Benzo[a]anthracene	4.77	3.651		mg/Kg		77	40 - 140
Benzo[a]pyrene	4.77	3.605		mg/Kg		76	40 - 140
Benzo[b]fluoranthene	4.77	3.573		mg/Kg		75	40 - 140
Benzo[g,h,i]perylene	4.77	3.519		mg/Kg		74	40 - 140
Benzo[k]fluoranthene	4.77	3.639		mg/Kg		76	40 - 140
2-Methylnaphthalene	4.77	2.250		mg/Kg		47	40 - 140
Chrysene	4.77	3.681		mg/Kg		77	40 - 140
Dibenz(a,h)anthracene	4.77	3.650		mg/Kg		77	40 - 140
Fluoranthene	4.77	3.600		mg/Kg		75	40 - 140
Fluorene	4.77	3.036		mg/Kg		64	40 - 140
Indeno[1,2,3-cd]pyrene	4.77	3.570		mg/Kg		75	40 - 140
Naphthalene	4.77	2.096		mg/Kg		44	40 - 140
Phenanthrene	4.77	3.403		mg/Kg		71	40 - 140
Pyrene	4.77	3.699		mg/Kg		78	40 - 140
C11-C22 Aromatics (unadjusted)	81.1	55.87		mg/Kg		69	40 - 140

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCS 480-154450/2-B

Matrix: Solid

Analysis Batch: 154895

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154450

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C19-C36 Aliphatics	38.2	29.51		mg/Kg		77	40 - 140
C9-C18 Aliphatics	28.6	17.82		mg/Kg		62	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	74		40 - 140
2-Bromonaphthalene	66		40 - 140
2-Fluorobiphenyl	83		40 - 140
o-Terphenyl	68		40 - 140

Lab Sample ID: LCSD 480-154450/3-B

Matrix: Solid

Analysis Batch: 154895

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154450

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	4.84	2.749		mg/Kg		57	40 - 140	7	25
Acenaphthylene	4.84	2.801		mg/Kg		58	40 - 140	0	25
Anthracene	4.84	3.503		mg/Kg		72	40 - 140	1	25
Benzo[a]anthracene	4.84	3.741		mg/Kg		77	40 - 140	2	25
Benzo[a]pyrene	4.84	3.675		mg/Kg		76	40 - 140	2	25
Benzo[b]fluoranthene	4.84	3.645		mg/Kg		75	40 - 140	2	25
Benzo[g,h,i]perylene	4.84	3.639		mg/Kg		75	40 - 140	3	25
Benzo[k]fluoranthene	4.84	3.744		mg/Kg		77	40 - 140	3	25
2-Methylnaphthalene	4.84	2.388		mg/Kg		49	40 - 140	6	25
Chrysene	4.84	3.780		mg/Kg		78	40 - 140	3	25
Dibenz(a,h)anthracene	4.84	3.697		mg/Kg		76	40 - 140	1	25
Fluoranthene	4.84	3.679		mg/Kg		76	40 - 140	2	25
Fluorene	4.84	3.067		mg/Kg		63	40 - 140	1	25
Indeno[1,2,3-cd]pyrene	4.84	3.633		mg/Kg		75	40 - 140	2	25
Naphthalene	4.84	2.146		mg/Kg		44	40 - 140	2	25
Phenanthrene	4.84	3.440		mg/Kg		71	40 - 140	1	25
Pyrene	4.84	3.757		mg/Kg		78	40 - 140	2	25
C11-C22 Aromatics (unadjusted)	82.2	57.37		mg/Kg		70	40 - 140	3	25
C19-C36 Aliphatics	38.7	29.07		mg/Kg		75	40 - 140	2	25
C9-C18 Aliphatics	29.0	15.92		mg/Kg		55	40 - 140	11	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctadecane	72		40 - 140
2-Bromonaphthalene	74		40 - 140
2-Fluorobiphenyl	89		40 - 140
o-Terphenyl	66		40 - 140

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-154522/1-A

Matrix: Solid

Analysis Batch: 155061

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154522

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.491		0.491	0.196	mg/Kg		11/26/13 10:00	12/01/13 00:24	1
Barium	<0.491		0.491	0.108	mg/Kg		11/26/13 10:00	12/01/13 00:24	1
Beryllium	<0.196		0.196	0.0275	mg/Kg		11/26/13 10:00	12/01/13 00:24	1
Cadmium	<0.196		0.196	0.0295	mg/Kg		11/26/13 10:00	12/01/13 00:24	1
Chromium	<0.491		0.491	0.196	mg/Kg		11/26/13 10:00	12/01/13 00:24	1
Nickel	<0.982		0.982	0.226	mg/Kg		11/26/13 10:00	12/01/13 00:24	1
Vanadium	<0.491		0.491	0.108	mg/Kg		11/26/13 10:00	12/01/13 00:24	1
Zinc	0.3711	J	2.45	0.150	mg/Kg		11/26/13 10:00	12/01/13 00:24	1
Lead	<0.491		0.491	0.236	mg/Kg		11/26/13 10:00	12/01/13 00:24	1

Lab Sample ID: MB 480-154522/1-A

Matrix: Solid

Analysis Batch: 155331

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154522

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.982		0.982	0.393	mg/Kg		11/26/13 10:00	12/02/13 16:31	1
Thallium	<0.982		0.982	0.295	mg/Kg		11/26/13 10:00	12/02/13 16:31	1
Selenium	<0.491		0.491	0.393	mg/Kg		11/26/13 10:00	12/02/13 16:31	1
Antimony	<0.491	^	0.491	0.393	mg/Kg		11/26/13 10:00	12/02/13 16:31	1

Lab Sample ID: LCDSRM 480-154522/3-A LCDSRM

Matrix: Solid

Analysis Batch: 155061

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154522

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	40.4	38.78		mg/Kg		96.0	65.8 - 133.7	2	20
Barium	310	302.9		mg/Kg		97.7	74.2 - 126.1	5	20
Beryllium	72.3	71.35		mg/Kg		98.7	73.9 - 126.1	0	20
Cadmium	182	172.5		mg/Kg		94.8	73.6 - 126.4	3	20
Chromium	136	128.7		mg/Kg		94.6	70.4 - 130.1	1	20
Nickel	153	156.5		mg/Kg		102.3	73.2 - 126.1	1	20
Vanadium	97.6	88.15		mg/Kg		90.3	65.2 - 135.2	1	20
Zinc	161	145.0		mg/Kg		90.0	68.3 - 131.7	1	20
Lead	115	112.1		mg/Kg		97.4	72.1 - 128.7	1	20

Lab Sample ID: LCDSRM 480-154522/3-A LCDSRM

Matrix: Solid

Analysis Batch: 155331

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154522

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	99.6	101.2		mg/Kg		101.6	69.3 - 130.5	1	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-154522/3-A LCDSRM

Matrix: Solid

Analysis Batch: 155331

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154522

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Thallium	174	182.4		mg/Kg		104.8	69.0 - 131.6	4	20
Selenium	150	151.2		mg/Kg		100.8	67.3 - 132.7	1	20
Antimony	88.2	66.94	^	mg/Kg		75.9	26.3 - 289.1	0	20

Lab Sample ID: LCSSRM 480-154522/2-A

Matrix: Solid

Analysis Batch: 155061

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154522

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Silver	40.4	39.41		mg/Kg		97.5	65.8 - 133.7		
Barium	310	289.1		mg/Kg		93.2	74.2 - 126.1		
Beryllium	72.3	71.29		mg/Kg		98.6	73.9 - 126.1		
Cadmium	182	178.3		mg/Kg		97.9	73.6 - 126.4		
Chromium	136	128.0		mg/Kg		94.0	70.4 - 130.1		
Nickel	153	158.5		mg/Kg		103.5	73.2 - 126.1		
Vanadium	97.6	86.88		mg/Kg		89.0	65.2 - 135.2		
Zinc	161	146.0		mg/Kg		90.7	68.3 - 131.7		
Lead	115	113.7		mg/Kg		98.8	72.1 - 128.7		

Lab Sample ID: LCSSRM 480-154522/2-A

Matrix: Solid

Analysis Batch: 155331

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154522

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	99.6	100.5		mg/Kg		100.9	69.3 - 130.5		
Thallium	174	175.0		mg/Kg		100.5	69.0 - 131.6		
Selenium	150	152.1		mg/Kg		101.4	67.3 - 132.7		
Antimony	88.2	67.18	^	mg/Kg		76.1	26.3 - 289.1		

Lab Sample ID: 480-50846-11 MS

Matrix: Solid

Analysis Batch: 155061

Client Sample ID: WCSS-58 (0-0.25) MS

Prep Type: Total/NA

Prep Batch: 154522

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Silver	<0.493		10.2	9.727		mg/Kg	☼	95	75 - 125		
Barium	49.1		40.8	80.97		mg/Kg	☼	78	75 - 125		
Beryllium	0.277		40.8	40.17		mg/Kg	☼	98	75 - 125		

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: 480-50846-11 MS

Matrix: Solid

Analysis Batch: 155061

Client Sample ID: WCSS-58 (0-0.25) MS

Prep Type: Total/NA

Prep Batch: 154522

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.654		40.8	39.90		mg/Kg	☼	96	75 - 125
Chromium	25.4		40.8	67.96		mg/Kg	☼	104	75 - 125
Nickel	23.7		40.8	69.45		mg/Kg	☼	112	75 - 125
Vanadium	22.9		40.8	68.95		mg/Kg	☼	113	75 - 125
Lead	121		40.8	181.2	F	mg/Kg	☼	147	75 - 125

Lab Sample ID: 480-50846-11 MS

Matrix: Solid

Analysis Batch: 155331

Client Sample ID: WCSS-58 (0-0.25) MS

Prep Type: Total/NA

Prep Batch: 154522

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	3.42		40.8	44.40		mg/Kg	☼	100	75 - 125
Thallium	<0.986		40.8	39.65		mg/Kg	☼	97	75 - 125
Zinc	137	B	40.8	193.9	F	mg/Kg	☼	139	75 - 125
Selenium	<0.493		40.8	40.69		mg/Kg	☼	100	75 - 125
Antimony	<0.493	^	40.8	35.53	^	mg/Kg	☼	87	75 - 125

Lab Sample ID: 480-50846-11 MSD

Matrix: Solid

Analysis Batch: 155061

Client Sample ID: WCSS-58 (0-0.25) MSD

Prep Type: Total/NA

Prep Batch: 154522

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Silver	<0.493		9.82	9.186		mg/Kg	☼	94	75 - 125	6	35
Barium	49.1		39.3	78.88		mg/Kg	☼	76	75 - 125	3	35
Beryllium	0.277		39.3	37.80		mg/Kg	☼	96	75 - 125	6	35
Cadmium	0.654		39.3	37.49		mg/Kg	☼	94	75 - 125	6	35
Chromium	25.4		39.3	56.50		mg/Kg	☼	79	75 - 125	18	35
Nickel	23.7		39.3	59.30		mg/Kg	☼	91	75 - 125	16	35
Vanadium	22.9		39.3	55.58		mg/Kg	☼	83	75 - 125	21	35
Lead	121		39.3	162.8		mg/Kg	☼	106	75 - 125	11	35

Lab Sample ID: 480-50846-11 MSD

Matrix: Solid

Analysis Batch: 155331

Client Sample ID: WCSS-58 (0-0.25) MSD

Prep Type: Total/NA

Prep Batch: 154522

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	3.42		39.3	41.56		mg/Kg	☼	97	75 - 125	7	35
Thallium	<0.986		39.3	37.71		mg/Kg	☼	96	75 - 125	5	35
Zinc	137	B	39.3	167.8		mg/Kg	☼	78	75 - 125	14	35
Selenium	<0.493		39.3	38.73		mg/Kg	☼	99	75 - 125	5	35
Antimony	<0.493	^	39.3	35.16	^	mg/Kg	☼	90	75 - 125	1	35

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-154828/1-A

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154828

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.100		0.100	0.00812	mg/Kg		11/29/13 08:40	11/29/13 14:03	1

Lab Sample ID: LCDSRM 480-154828/3-A LCDSRM

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154828

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.75	2.331		mg/Kg		62.2	50.9 - 149. 1	13	

Lab Sample ID: LCSSRM 480-154828/2-A

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154828

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.76	2.042		mg/Kg		54.4	50.9 - 149. 1		

Lab Sample ID: 480-50846-11 MS

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: WCSS-58 (0-0.25) MS

Prep Type: Total/NA

Prep Batch: 154828

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0807	J	0.344	0.2721	F	mg/Kg	☼	56	75 - 125		

Lab Sample ID: 480-50846-11 MSD

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: WCSS-58 (0-0.25) MSD

Prep Type: Total/NA

Prep Batch: 154828

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0807	J	0.345	0.2910	F	mg/Kg	☼	61	75 - 125	7	35

Lab Sample ID: MB 480-154829/1-A

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154829

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0993		0.0993	0.00804	mg/Kg		11/29/13 08:40	11/29/13 15:50	1

Lab Sample ID: LCDSRM 480-154829/3-A LCDSRM

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154829

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.77	2.043		mg/Kg		54.2	50.9 - 149. 1	4	

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-154829/2-A

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154829

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.77	1.963		mg/Kg		52.1	50.9 - 149. 1

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

GC/MS VOA

Analysis Batch: 154424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-13	WCSS-56 (0-0.25)	Total/NA	Solid	8260C	154449
480-50846-14	WCSS-55 (0-0.25)	Total/NA	Solid	8260C	154449
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	8260C	154449
480-50846-20	TB-11222013 (1)	Total/NA	Solid	8260C	154449
LCS 480-154424/4	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 480-154424/5	Lab Control Sample Dup	Total/NA	Solid	8260C	
MB 480-154424/6	Method Blank	Total/NA	Solid	8260C	

Prep Batch: 154449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-13	WCSS-56 (0-0.25)	Total/NA	Solid	5035	
480-50846-14	WCSS-55 (0-0.25)	Total/NA	Solid	5035	
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	5035	
480-50846-20	TB-11222013 (1)	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 111692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-1	WCSS-61 (0-0.25)	Total/NA	Solid	3540C	
480-50846-2	WCSS-47 (0-0.25)	Total/NA	Solid	3540C	
480-50846-3	WCSS-60 (0-0.25)	Total/NA	Solid	3540C	
480-50846-4	WCSS-59 (0-0.25)	Total/NA	Solid	3540C	
480-50846-5	WCSS-54 (0-0.25)	Total/NA	Solid	3540C	
480-50846-6	WCSS-53 (0-0.25)	Total/NA	Solid	3540C	
480-50846-7	WCSS-52 (0-0.25)	Total/NA	Solid	3540C	
480-50846-9	WCSS-49 (0-0.25)	Total/NA	Solid	3540C	
480-50846-11	WCSS-58 (0-0.25)	Total/NA	Solid	3540C	
480-50846-12	WCSS-958 (0-0.25)	Total/NA	Solid	3540C	
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	3540C	
480-50846-16	WCSS-62 (0-0.25)	Total/NA	Solid	3540C	
480-50846-17	WCSS-63 (0-0.25)	Total/NA	Solid	3540C	
LCS 240-111692/24-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-111692/25-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-111692/23-A	Method Blank	Total/NA	Solid	3540C	

Prep Batch: 112062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-8	WCSS-51 (0-0.25)	Total/NA	Solid	3540C	
LCS 240-112062/24-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-112062/25-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-112062/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 112117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-1	WCSS-61 (0-0.25)	Total/NA	Solid	8082	111692
480-50846-2	WCSS-47 (0-0.25)	Total/NA	Solid	8082	111692
480-50846-3	WCSS-60 (0-0.25)	Total/NA	Solid	8082	111692
480-50846-4	WCSS-59 (0-0.25)	Total/NA	Solid	8082	111692
480-50846-5	WCSS-54 (0-0.25)	Total/NA	Solid	8082	111692

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

GC Semi VOA (Continued)

Analysis Batch: 112117 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-6	WCSS-53 (0-0.25)	Total/NA	Solid	8082	111692
480-50846-7	WCSS-52 (0-0.25)	Total/NA	Solid	8082	111692
480-50846-9	WCSS-49 (0-0.25)	Total/NA	Solid	8082	111692
480-50846-11	WCSS-58 (0-0.25)	Total/NA	Solid	8082	111692
480-50846-12	WCSS-958 (0-0.25)	Total/NA	Solid	8082	111692
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	8082	111692
480-50846-16	WCSS-62 (0-0.25)	Total/NA	Solid	8082	111692
480-50846-17	WCSS-63 (0-0.25)	Total/NA	Solid	8082	111692
LCS 240-111692/24-A	Lab Control Sample	Total/NA	Solid	8082	111692
LCSD 240-111692/25-A	Lab Control Sample Dup	Total/NA	Solid	8082	111692

Analysis Batch: 112330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-111692/23-A	Method Blank	Total/NA	Solid	8082	111692

Analysis Batch: 112688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-112062/24-A	Lab Control Sample	Total/NA	Solid	8082	112062
LCSD 240-112062/25-A	Lab Control Sample Dup	Total/NA	Solid	8082	112062
MB 240-112062/23-A	Method Blank	Total/NA	Solid	8082	112062

Analysis Batch: 112886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-8	WCSS-51 (0-0.25)	Total/NA	Solid	8082	112062

Prep Batch: 154450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	3546	
LCS 480-154450/2-B	Lab Control Sample	Total/NA	Solid	3546	
LCSD 480-154450/3-B	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 480-154450/1-B	Method Blank	Total/NA	Solid	3546	

Fraction Batch: 154639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	MA EPH Frac	154450
LCS 480-154450/2-B	Lab Control Sample	Total/NA	Solid	MA EPH Frac	154450
LCSD 480-154450/3-B	Lab Control Sample Dup	Total/NA	Solid	MA EPH Frac	154450
MB 480-154450/1-B	Method Blank	Total/NA	Solid	MA EPH Frac	154450

Prep Batch: 154839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-19	WCEB-57 (0-0.25)	Total/NA	Water	3510C	
LCS 480-154839/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-154839/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-154839/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 154895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	MA-EPH	154639
LCS 480-154450/2-B	Lab Control Sample	Total/NA	Solid	MA-EPH	154639
LCSD 480-154450/3-B	Lab Control Sample Dup	Total/NA	Solid	MA-EPH	154639

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

GC Semi VOA (Continued)

Analysis Batch: 154895 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-154450/1-B	Method Blank	Total/NA	Solid	MA-EPH	154639

Analysis Batch: 154990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-19	WCEB-57 (0-0.25)	Total/NA	Water	8082	154839
LCS 480-154839/2-A	Lab Control Sample	Total/NA	Water	8082	154839
LCSD 480-154839/3-A	Lab Control Sample Dup	Total/NA	Water	8082	154839
MB 480-154839/1-A	Method Blank	Total/NA	Water	8082	154839

Analysis Batch: 155390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	MA-EPH	

Metals

Prep Batch: 154522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-1	WCSS-61 (0-0.25)	Total/NA	Solid	3050B	
480-50846-3	WCSS-60 (0-0.25)	Total/NA	Solid	3050B	
480-50846-4	WCSS-59 (0-0.25)	Total/NA	Solid	3050B	
480-50846-5	WCSS-54 (0-0.25)	Total/NA	Solid	3050B	
480-50846-6	WCSS-53 (0-0.25)	Total/NA	Solid	3050B	
480-50846-7	WCSS-52 (0-0.25)	Total/NA	Solid	3050B	
480-50846-8	WCSS-51 (0-0.25)	Total/NA	Solid	3050B	
480-50846-9	WCSS-49 (0-0.25)	Total/NA	Solid	3050B	
480-50846-10	WCSS-50 (0-0.25)	Total/NA	Solid	3050B	
480-50846-11	WCSS-58 (0-0.25)	Total/NA	Solid	3050B	
480-50846-11 MS	WCSS-58 (0-0.25) MS	Total/NA	Solid	3050B	
480-50846-11 MSD	WCSS-58 (0-0.25) MSD	Total/NA	Solid	3050B	
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	3050B	
480-50846-16	WCSS-62 (0-0.25)	Total/NA	Solid	3050B	
480-50846-17	WCSS-63 (0-0.25)	Total/NA	Solid	3050B	
480-50846-18	WCSS-72(0-0.25)	Total/NA	Solid	3050B	
LCDSRM 480-154522/3-A LCDS	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-154522/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-154522/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 154828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-1	WCSS-61 (0-0.25)	Total/NA	Solid	7471A	
480-50846-3	WCSS-60 (0-0.25)	Total/NA	Solid	7471A	
480-50846-4	WCSS-59 (0-0.25)	Total/NA	Solid	7471A	
480-50846-5	WCSS-54 (0-0.25)	Total/NA	Solid	7471A	
480-50846-6	WCSS-53 (0-0.25)	Total/NA	Solid	7471A	
480-50846-7	WCSS-52 (0-0.25)	Total/NA	Solid	7471A	
480-50846-8	WCSS-51 (0-0.25)	Total/NA	Solid	7471A	
480-50846-9	WCSS-49 (0-0.25)	Total/NA	Solid	7471A	
480-50846-10	WCSS-50 (0-0.25)	Total/NA	Solid	7471A	
480-50846-11	WCSS-58 (0-0.25)	Total/NA	Solid	7471A	
480-50846-11 MS	WCSS-58 (0-0.25) MS	Total/NA	Solid	7471A	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Metals (Continued)

Prep Batch: 154828 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-11 MSD	WCSS-58 (0-0.25) MSD	Total/NA	Solid	7471A	
LCDSRM 480-154828/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-154828/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-154828/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 154829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	7471A	
480-50846-16	WCSS-62 (0-0.25)	Total/NA	Solid	7471A	
480-50846-17	WCSS-63 (0-0.25)	Total/NA	Solid	7471A	
480-50846-18	WCSS-72(0-0.25)	Total/NA	Solid	7471A	
LCDSRM 480-154829/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-154829/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-154829/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 155027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-1	WCSS-61 (0-0.25)	Total/NA	Solid	7471A	154828
480-50846-3	WCSS-60 (0-0.25)	Total/NA	Solid	7471A	154828
480-50846-4	WCSS-59 (0-0.25)	Total/NA	Solid	7471A	154828
480-50846-5	WCSS-54 (0-0.25)	Total/NA	Solid	7471A	154828
480-50846-6	WCSS-53 (0-0.25)	Total/NA	Solid	7471A	154828
480-50846-7	WCSS-52 (0-0.25)	Total/NA	Solid	7471A	154828
480-50846-8	WCSS-51 (0-0.25)	Total/NA	Solid	7471A	154828
480-50846-9	WCSS-49 (0-0.25)	Total/NA	Solid	7471A	154828
480-50846-10	WCSS-50 (0-0.25)	Total/NA	Solid	7471A	154828
480-50846-11	WCSS-58 (0-0.25)	Total/NA	Solid	7471A	154828
480-50846-11 MS	WCSS-58 (0-0.25) MS	Total/NA	Solid	7471A	154828
480-50846-11 MSD	WCSS-58 (0-0.25) MSD	Total/NA	Solid	7471A	154828
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	7471A	154829
480-50846-16	WCSS-62 (0-0.25)	Total/NA	Solid	7471A	154829
480-50846-17	WCSS-63 (0-0.25)	Total/NA	Solid	7471A	154829
480-50846-18	WCSS-72(0-0.25)	Total/NA	Solid	7471A	154829
LCDSRM 480-154828/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	7471A	154828
LCDSRM 480-154829/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	7471A	154829
LCSSRM 480-154828/2-A	Lab Control Sample	Total/NA	Solid	7471A	154828
LCSSRM 480-154829/2-A	Lab Control Sample	Total/NA	Solid	7471A	154829
MB 480-154828/1-A	Method Blank	Total/NA	Solid	7471A	154828
MB 480-154829/1-A	Method Blank	Total/NA	Solid	7471A	154829

Analysis Batch: 155061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-1	WCSS-61 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-3	WCSS-60 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-4	WCSS-59 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-5	WCSS-54 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-6	WCSS-53 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-7	WCSS-52 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-8	WCSS-51 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-9	WCSS-49 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-10	WCSS-50 (0-0.25)	Total/NA	Solid	6010	154522

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Metals (Continued)

Analysis Batch: 155061 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-11	WCSS-58 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-11 MS	WCSS-58 (0-0.25) MS	Total/NA	Solid	6010	154522
480-50846-11 MSD	WCSS-58 (0-0.25) MSD	Total/NA	Solid	6010	154522
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-16	WCSS-62 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-17	WCSS-63 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-18	WCSS-72(0-0.25)	Total/NA	Solid	6010	154522
LCDSRM 480-154522/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	6010	154522
LCSSRM 480-154522/2-A	Lab Control Sample	Total/NA	Solid	6010	154522
MB 480-154522/1-A	Method Blank	Total/NA	Solid	6010	154522

Analysis Batch: 155331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-1	WCSS-61 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-3	WCSS-60 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-4	WCSS-59 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-5	WCSS-54 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-6	WCSS-53 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-7	WCSS-52 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-8	WCSS-51 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-9	WCSS-49 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-10	WCSS-50 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-11	WCSS-58 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-11 MS	WCSS-58 (0-0.25) MS	Total/NA	Solid	6010	154522
480-50846-11 MSD	WCSS-58 (0-0.25) MSD	Total/NA	Solid	6010	154522
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-16	WCSS-62 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-17	WCSS-63 (0-0.25)	Total/NA	Solid	6010	154522
480-50846-18	WCSS-72(0-0.25)	Total/NA	Solid	6010	154522
LCDSRM 480-154522/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	6010	154522
LCSSRM 480-154522/2-A	Lab Control Sample	Total/NA	Solid	6010	154522
MB 480-154522/1-A	Method Blank	Total/NA	Solid	6010	154522

General Chemistry

Analysis Batch: 111911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-1	WCSS-61 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-1 DU	WCSS-61 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-2	WCSS-47 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-3	WCSS-60 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-4	WCSS-59 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-5	WCSS-54 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-6	WCSS-53 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-7	WCSS-52 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-8	WCSS-51 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-9	WCSS-49 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-12	WCSS-958 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-12 DU	WCSS-958 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-15	WCSS-57 (0-0.25)	Total/NA	Solid	Moisture	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

General Chemistry (Continued)

Analysis Batch: 111911 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-16	WCSS-62 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-17	WCSS-63 (0-0.25)	Total/NA	Solid	Moisture	

Analysis Batch: 154545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50846-10	WCSS-50 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-11	WCSS-58 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-11 MS	WCSS-58 (0-0.25) MS	Total/NA	Solid	Moisture	
480-50846-11 MSD	WCSS-58 (0-0.25) MSD	Total/NA	Solid	Moisture	
480-50846-13	WCSS-56 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-14	WCSS-55 (0-0.25)	Total/NA	Solid	Moisture	
480-50846-18	WCSS-72(0-0.25)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-61 (0-0.25)

Date Collected: 11/22/13 07:50

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50846-1

Matrix: Solid

Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	112117	12/03/13 22:21	LSH	TAL CAN
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Prep	7471A			154828	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 15:21	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 00:41	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 16:49	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:08	BLW	TAL CAN

Client Sample ID: WCSS-47 (0-0.25)

Date Collected: 11/22/13 08:00

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50846-2

Matrix: Solid

Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		5	112117	12/03/13 22:36	LSH	TAL CAN
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:08	BLW	TAL CAN

Client Sample ID: WCSS-60 (0-0.25)

Date Collected: 11/22/13 08:10

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50846-3

Matrix: Solid

Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		5	112117	12/03/13 22:52	LSH	TAL CAN
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Prep	7471A			154828	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 15:22	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 00:44	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 17:03	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:08	BLW	TAL CAN

Client Sample ID: WCSS-59 (0-0.25)

Date Collected: 11/22/13 08:25

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50846-4

Matrix: Solid

Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	8082		1	112117	12/03/13 23:08	LSH	TAL CAN
Total/NA	Prep	7471A			154828	11/29/13 08:40	JRK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-59 (0-0.25)

Lab Sample ID: 480-50846-4

Date Collected: 11/22/13 08:25

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		1	155027	11/29/13 15:24	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 00:54	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 17:05	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSS-54 (0-0.25)

Lab Sample ID: 480-50846-5

Date Collected: 11/22/13 08:35

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 96.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	8082		5	112117	12/03/13 23:39	LSH	TAL CAN
Total/NA	Prep	7471A			154828	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 15:26	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 00:56	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 17:08	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSS-53 (0-0.25)

Lab Sample ID: 480-50846-6

Date Collected: 11/22/13 08:50

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 96.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	8082		5	112117	12/03/13 23:55	LSH	TAL CAN
Total/NA	Prep	7471A			154828	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 15:28	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 00:58	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 17:10	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-52 (0-0.25)

Lab Sample ID: 480-50846-7

Date Collected: 11/22/13 09:00

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 88.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	8082		10	112117	12/04/13 00:11	LSH	TAL CAN
Total/NA	Prep	7471A			154828	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 15:30	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 01:00	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 17:13	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSS-51 (0-0.25)

Lab Sample ID: 480-50846-8

Date Collected: 11/22/13 09:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			112062	12/03/13 10:08	MPM	TAL CAN
Total/NA	Analysis	8082		20	112886	12/09/13 17:07	LSH	TAL CAN
Total/NA	Prep	7471A			154828	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		10	155027	11/29/13 15:32	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 01:03	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 17:16	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSS-49 (0-0.25)

Lab Sample ID: 480-50846-9

Date Collected: 11/22/13 09:20

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 86.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		10	112117	12/03/13 16:34	LSH	TAL CAN
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Prep	7471A			154828	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		20	155027	11/29/13 15:33	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 01:05	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 17:18	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-50 (0-0.25)

Lab Sample ID: 480-50846-10

Date Collected: 11/22/13 09:30

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			154828	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 15:36	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 01:08	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 17:21	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	154545	11/26/13 19:24	GTG	TAL BUF

Client Sample ID: WCSS-58 (0-0.25)

Lab Sample ID: 480-50846-11

Date Collected: 11/22/13 09:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 93.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	8082		5	112117	12/03/13 16:50	LSH	TAL CAN
Total/NA	Prep	7471A			154828	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 15:41	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 01:10	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 17:34	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	154545	11/26/13 19:24	GTG	TAL BUF

Client Sample ID: WCSS-958 (0-0.25)

Lab Sample ID: 480-50846-12

Date Collected: 11/22/13 09:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	8082		5	112117	12/03/13 17:06	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSS-56 (0-0.25)

Lab Sample ID: 480-50846-13

Date Collected: 11/22/13 10:00

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 91.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			154449	11/26/13 10:30	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	154424	11/26/13 15:06	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	154545	11/26/13 19:24	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-55 (0-0.25)

Lab Sample ID: 480-50846-14

Date Collected: 11/22/13 10:05

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 92.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			154449	11/26/13 10:30	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	154424	11/26/13 15:31	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	154545	11/26/13 19:24	GTG	TAL BUF

Client Sample ID: WCSS-57 (0-0.25)

Lab Sample ID: 480-50846-15

Date Collected: 11/22/13 10:15

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			154449	11/26/13 10:30	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	154424	11/26/13 15:56	CDC	TAL BUF
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	8082		1	112117	12/03/13 17:21	LSH	TAL CAN
Total/NA	Fraction	MA EPH Frac			154639	11/27/13 08:07	KEB	TAL BUF
Total/NA	Prep	3546			154450	11/26/13 10:37	CAM	TAL BUF
Total/NA	Analysis	MA-EPH		1	154895	11/29/13 17:22	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	155390	12/03/13 12:12	DGB	TAL BUF
Total/NA	Prep	7471A			154829	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 15:55	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 01:29	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 17:47	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSS-62 (0-0.25)

Lab Sample ID: 480-50846-16

Date Collected: 11/22/13 10:35

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		10	112117	12/03/13 17:53	LSH	TAL CAN
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Prep	7471A			154829	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		5	155027	11/29/13 16:38	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 01:32	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 17:49	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50846-1

Client Sample ID: WCSS-63 (0-0.25)

Lab Sample ID: 480-50846-17

Date Collected: 11/22/13 10:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 51.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	8082		20	112117	12/03/13 18:09	LSH	TAL CAN
Total/NA	Prep	7471A			154829	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 16:02	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 01:34	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 17:52	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSS-72(0-0.25)

Lab Sample ID: 480-50846-18

Date Collected: 11/22/13 10:50

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			154829	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 16:04	JRK	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155061	12/01/13 01:37	AMH	TAL BUF
Total/NA	Prep	3050B			154522	11/26/13 10:00	SS1	TAL BUF
Total/NA	Analysis	6010		1	155331	12/02/13 18:05	AMH	TAL BUF
Total/NA	Analysis	Moisture		1	154545	11/26/13 19:24	GTG	TAL BUF

Client Sample ID: WCEB-57 (0-0.25)

Lab Sample ID: 480-50846-19

Date Collected: 11/22/13 11:15

Matrix: Water

Date Received: 11/26/13 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			154839	11/29/13 07:49	KEB	TAL BUF
Total/NA	Analysis	8082		1	154990	11/30/13 13:27	JMM	TAL BUF

Client Sample ID: TB-11222013 (1)

Lab Sample ID: 480-50846-20

Date Collected: 11/22/13 12:00

Matrix: Solid

Date Received: 11/26/13 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			154449	11/26/13 10:30	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	154424	11/26/13 16:22	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TestAmerica Buffalo

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13 *
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13 *
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13 *
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13 *
Wisconsin	State Program	5	998310390	08-31-14

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13 *
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-14 *
Kentucky (UST)	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Laboratory: TestAmerica Canton (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14 *
West Virginia DEP	State Program	3	210	12-31-13 *
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL CAN
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL BUF
MA-EPH	Massachusetts - Extractable Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL CAN
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50846-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-50846-1	WCSS-61 (0-0.25)	Solid	11/22/13 07:50	11/26/13 02:00
480-50846-2	WCSS-47 (0-0.25)	Solid	11/22/13 08:00	11/26/13 02:00
480-50846-3	WCSS-60 (0-0.25)	Solid	11/22/13 08:10	11/26/13 02:00
480-50846-4	WCSS-59 (0-0.25)	Solid	11/22/13 08:25	11/26/13 02:00
480-50846-5	WCSS-54 (0-0.25)	Solid	11/22/13 08:35	11/26/13 02:00
480-50846-6	WCSS-53 (0-0.25)	Solid	11/22/13 08:50	11/26/13 02:00
480-50846-7	WCSS-52 (0-0.25)	Solid	11/22/13 09:00	11/26/13 02:00
480-50846-8	WCSS-51 (0-0.25)	Solid	11/22/13 09:10	11/26/13 02:00
480-50846-9	WCSS-49 (0-0.25)	Solid	11/22/13 09:20	11/26/13 02:00
480-50846-10	WCSS-50 (0-0.25)	Solid	11/22/13 09:30	11/26/13 02:00
480-50846-11	WCSS-58 (0-0.25)	Solid	11/22/13 09:40	11/26/13 02:00
480-50846-12	WCSS-958 (0-0.25)	Solid	11/22/13 09:40	11/26/13 02:00
480-50846-13	WCSS-56 (0-0.25)	Solid	11/22/13 10:00	11/26/13 02:00
480-50846-14	WCSS-55 (0-0.25)	Solid	11/22/13 10:05	11/26/13 02:00
480-50846-15	WCSS-57 (0-0.25)	Solid	11/22/13 10:15	11/26/13 02:00
480-50846-16	WCSS-62 (0-0.25)	Solid	11/22/13 10:35	11/26/13 02:00
480-50846-17	WCSS-63 (0-0.25)	Solid	11/22/13 10:40	11/26/13 02:00
480-50846-18	WCSS-72(0-0.25)	Solid	11/22/13 10:50	11/26/13 02:00
480-50846-19	WCEB-57 (0-0.25)	Water	11/22/13 11:15	11/26/13 02:00
480-50846-20	TB-11222013 (1)	Solid	11/22/13 12:00	11/26/13 02:00

Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-50846-1

Login Number: 50846

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Chain of Custody Record

Temperature on Receipt _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client Woodard & Curran			Project Manager Jarrod Yeoder			Date 11/22/13		Chain of Custody Number 255790	
Address 980 Washington Street			Telephone Number (Area Code)/Fax Number 978-557-8150			Lab Number		Page 1 of 2	
City Dedham	State MA	Zip Code 02026	Site Contact Ryan Smith		Lab Contact Becky Mason		Analysis (Attach list if more space is needed)		
Project Name and Location (State) Quincy - Interstate			Carrier/Waybill Number						Special Instructions/ Conditions of Receipt
Contract/Purchase Order/Quote No.									

Contract/Purchase Order/Quote No.			Matrix				Containers & Preservatives						Special Instructions/Conditions of Receipt																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	PCB (8082)	PCP 14 Met	VOCs (8260)	EPH (HeNER)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

Possible Hazard Identification			Sample Disposal			(A fee may be assessed if samples are retained longer than 1 month)			
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input checked="" type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months		
Turn Around Time Required			QC Requirements (Specify)						
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input checked="" type="checkbox"/> Other Standard TAT	CAM methods required; GPS key & Excel file with PDF report			
1. Relinquished By [Signature]			Date 11/25/13	Time 1245	1. Received By M.C.			Date 11/25/13	Time 12:45
2. Relinquished By TAL			Date 11/25/13	Time 1630	2. Received By [Signature]			Date 11-26-13	Time 0220
3. Relinquished By			Date	Time	3. Received By			Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

3.3 3.6 #1

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client Woodland & Curran		Project Manager Journel Yecker		Date 11/22/13	Chain of Custody Number 255791	
Address 880 Washington Street		Telephone Number (Area Code)/Fax Number Woodland & Curran, 978-557-8150		Lab Number		Page 2 of 2
City Dedham	State MA	Zip Code 02026	Site Contact Ryan Smith	Lab Contact Rocky Mason	Analysis (Attach list if more space is needed)	
Project Name and Location (State) Quincy - Interstate			Carrier/Waybill Number		Special Instructions/ Conditions of Receipt	
Contract/Purchase Order/Quote No.			Containers &			

Special Instructions/
Conditions of Receipt

Contract/Purchase Order/Quote No.			Matrix				Containers & Preservatives								Conditions of Receipt		
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	NaOH/NaOH	NaOH/NaOH	NaOH/NaOH	NaOH/NaOH	NaOH/NaOH
WCSS-58 (0-0.25) MS	11/22/13	940				X	1										
WCSS-58 (0-0.25) MS		940				X	1										
WCSS-56 (0-0.25)		1000				X	1										
WCSS-55 (0-0.25)		1005				X	1										
WCSS-57 (0-0.25)		1015				X	3										
WCSS-62 (0-0.25)		1035				X	2										
WCSS-63 (0-0.25)		1040				X	2										
WCSS-72 (0-0.25)		1050				X	1										
WCEB-57 (0-0.25)		1115	X				1										
TB-1122013 (1)		1200				X	1										

→ Matrix Spike

→ Matrix Spike D

NOTE: DE-preserved WCC frozen at 2000 on 11

→ Class. sample delivery

Possible Hazard Identification		Sample Disposal		(A fee may be assessed if samples are retained longer than 1 month)	
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input checked="" type="checkbox"/> Disposal By Lab
Turn Around Time Required		Standard / Other		QC Requirements (Specify)	
		MSA TAL		C&M methods required; C&S Key & Excel file with PDF report	
1. Relinquished By		Date	Time	Report to MCP S-1 Standards	
[Signature]		11/25/13	12:45	[Signature] TAL	
2. Relinquished By		Date	Time	[Signature]	
[Signature] TAL		11/25/13	16:38	[Signature] TAL	
3. Relinquished By		Date	Time	[Signature]	

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-50847-1

Client Project/Site: Quincy Inervale

For:

Woodard & Curran Inc

40 Shattuck Road

Suite 110

Andover, Massachusetts 01810

Attn: Mr. Jarrod Yoder



Authorized for release by:

12/9/2013 1:45:54 PM

Steve Hartmann, Service Center Manager

(413)572-4000

steve.hartmann@testamericainc.com

Designee for

Becky Mason, Project Manager II

(413)572-4000

becky.mason@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F	MS/MSD Recovery and/or RPD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Job ID: 480-50847-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-50847-1

Comments

No additional comments.

Receipt

The samples were received on 11/26/2013 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.4° C, 2.7° C and 3.3° C.

The following samples were preserved by the client via freezing on 11/22/2013 at 20:00: TB-11222013 (2) (480-50847-27), WCSB-12 (2.5-3) (480-50847-22), WCSB-14 (7-8) (480-50847-19), WCSB-15 (0.5-1.5) (480-50847-16), WCSB-16 (6-7) (480-50847-15), WCSB-20 (16-17) (480-50847-2) . This is within the 48 hour timeframe required by the method.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) for Chloroethane and/or Dichlorodifluoromethane associated with batch 154424 and 154695 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.

Method(s) 8260C: The laboratory control sample (LCS) for batch 154424 and 154701 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample.

Method(s) 8260C: The following sample was analyzed medium level to bring the concentration of target analytes within the calibration range: WCSB-4 (1-2) (480-50847-3). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: Surrogate recovery for the following sample(s) was outside control limits: WCSB-4 (1-2) (480-50847-3). Re-analysis was performed with concurring results. The original analysis has been reported.

With the exception of diluted samples and adjustments made for % solids or insufficient sample mass, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-Dibromo-3-Chloropropane, Naphthalene, & Tetrahydrofuran.

No other analytical or quality issues were noted.

GC Semi VOA

Method(s) 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: WCSB-20 (14-15) (480-50847-1), WCSB-19 (2.5-3) (480-50847-9), WCSB-21 (2.5-3) (480-50847-7), EXS047040 (480-50647-4), EXS047040MS (480-50647-4 MS), EXS047040MSD (480-50647-4 MSD), WCSB-13 (2.5-3) (480-50847-20), WCSB-15 (2.5-3) (480-50847-17), WCSB-7 (7-8) (480-50847-26). Lot # S65830

Method(s) 8082: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 111693 recovered outside control limits for the following analytes: 1260 on the confirmation column. the LCS/LCSD were still in control, no corrective action was required.

Method(s) MA-EPH: The laboratory control sample (LCS) (LCS 480-155085/2-B) recovered slightly outside control limits for Napthalene. The Laboratory control sample duplicate (LCSD) recoveries are compliant and all other QC parameters are within limits.

No other analytical or quality issues were noted.

Metals

Method(s) 6010: The Method Blank for batch 480-154525 contained total zinc above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples WCSB-11 (6-7) (480-50847-25), WCSB-4 (7-8) (480-50847-4), WCSB-7 (7-8) (480-50847-26) was not performed.

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Job ID: 480-50847-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 6010: The Matrix Spike/ Matrix Spike Duplicate (MS/MSD) recoveries for chromium, antimony, and zinc in batch 480-154525 were outside control limits. The associated Laboratory Control Sample (LCSSRM) recovery met acceptance criteria, therefore no corrective action was necessary.

Method(s) 6010: The following sample(s) was diluted for silver due to the nature of the sample matrix: WCSB-11 (6-7) (480-50847-25), WCSB-11 (6-7) MS (480-50847-25 MS), WCSB-11 (6-7) MSD (480-50847-25 MSD). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

MassDEP Analytical Protocol Certification Form

Laboratory Name: **TestAmerica Buffalo** Project #: **480-50847**

Project Location: **Quincy Inervale** RTN:

This form provides certifications for the following data set: list Laboratory Sample ID Number(s):

480-50847-[1-27]

Matrices: ☐ Groundwater/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other:

CAM Protocols (check all that apply below):

8260 VOC CAM II A <input checked="" type="checkbox"/>	7470/7471 Hg CAM III B <input checked="" type="checkbox"/>	Mass DEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input type="checkbox"/>	Mass DEP EPH CAM IV B <input checked="" type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input checked="" type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input checked="" type="checkbox"/>	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	

Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status

A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Responses to Questions G, H and I below are required for "Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
----------	---	--

Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350

H	Were all QC performance standards specified in the CAM protocol(s) achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹

¹ All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.

Signature: 

Position: Service Center Manager/Lab Director-TestAmerica Westfield

Printed Name: Steven C. Hartmann

Date: 12/9/13 13:33

This form has been electronically signed and approved

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-20 (14-15)

Lab Sample ID: 480-50847-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	47.4		19.2	9.92	mg/Kg	500	✱	8082	Total/NA
Acenaphthene	3.86		0.580	0.0939	mg/Kg	1	✱	MA-EPH	Total/NA
Acenaphthylene	3.90		0.580	0.104	mg/Kg	1	✱	MA-EPH	Total/NA
Anthracene	7.75		0.580	0.110	mg/Kg	1	✱	MA-EPH	Total/NA
Benzo[a]anthracene	7.27		0.580	0.0881	mg/Kg	1	✱	MA-EPH	Total/NA
Benzo[a]pyrene	5.81		0.580	0.0835	mg/Kg	1	✱	MA-EPH	Total/NA
Benzo[b]fluoranthene	6.40		0.580	0.0823	mg/Kg	1	✱	MA-EPH	Total/NA
Benzo[g,h,i]perylene	2.38		0.580	0.0986	mg/Kg	1	✱	MA-EPH	Total/NA
Benzo[k]fluoranthene	4.12		0.580	0.0847	mg/Kg	1	✱	MA-EPH	Total/NA
2-Methylnaphthalene	4.50		0.580	0.114	mg/Kg	1	✱	MA-EPH	Total/NA
Chrysene	10.3		0.580	0.103	mg/Kg	1	✱	MA-EPH	Total/NA
Dibenz(a,h)anthracene	2.18	B	0.580	0.0812	mg/Kg	1	✱	MA-EPH	Total/NA
Fluoranthene	18.7		0.580	0.102	mg/Kg	1	✱	MA-EPH	Total/NA
Fluorene	7.08		0.580	0.116	mg/Kg	1	✱	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	2.70	B	0.580	0.0847	mg/Kg	1	✱	MA-EPH	Total/NA
Naphthalene	0.760		0.580	0.0974	mg/Kg	1	✱	MA-EPH	Total/NA
Phenanthrene	16.2		0.580	0.116	mg/Kg	1	✱	MA-EPH	Total/NA
Pyrene	12.6		0.580	0.106	mg/Kg	1	✱	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	721		5.80	2.32	mg/Kg	1	✱	MA-EPH	Total/NA
C19-C36 Aliphatics	283		5.80	2.32	mg/Kg	1	✱	MA-EPH	Total/NA
C9-C18 Aliphatics	193		5.80	2.32	mg/Kg	1	✱	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	605		5.87	5.87	mg/Kg	1	✱	MA-EPH	Total/NA

Client Sample ID: WCSB-4 (1-2)

Lab Sample ID: 480-50847-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.0579		0.00300	0.00115	mg/Kg	1	✱	8260C	Total/NA
1,3,5-Trimethylbenzene	0.0168		0.00300	0.000387	mg/Kg	1	✱	8260C	Total/NA
2-Butanone (MEK)	0.0712	*	0.0300	0.00220	mg/Kg	1	✱	8260C	Total/NA
4-Methyl-2-pentanone (MIBK)	0.0664		0.0300	0.00197	mg/Kg	1	✱	8260C	Total/NA
Acetone	0.0723	J	0.300	0.00506	mg/Kg	1	✱	8260C	Total/NA
Benzene	0.00380		0.00300	0.000294	mg/Kg	1	✱	8260C	Total/NA
Isopropylbenzene	0.00713		0.00300	0.000906	mg/Kg	1	✱	8260C	Total/NA
N-Propylbenzene	0.0111		0.00300	0.000481	mg/Kg	1	✱	8260C	Total/NA
Trichlorofluoromethane	0.00288	J	0.00601	0.000568	mg/Kg	1	✱	8260C	Total/NA
Ethylbenzene - DL	0.322		0.0712	0.00982	mg/Kg	1	✱	8260C	Total/NA
m-Xylene & p-Xylene - DL	1.43		0.142	0.0239	mg/Kg	1	✱	8260C	Total/NA
o-Xylene - DL	0.531		0.0712	0.0186	mg/Kg	1	✱	8260C	Total/NA
Toluene - DL	1.11		0.0712	0.0108	mg/Kg	1	✱	8260C	Total/NA

Client Sample ID: WCSB-4 (7-8)

Lab Sample ID: 480-50847-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	10.4		0.592	0.130	mg/Kg	1	✱	6010	Total/NA
Beryllium	0.0806	J	0.237	0.0332	mg/Kg	1	✱	6010	Total/NA
Chromium	4.02		0.592	0.237	mg/Kg	1	✱	6010	Total/NA
Nickel	3.00		1.18	0.273	mg/Kg	1	✱	6010	Total/NA
Vanadium	5.44		0.592	0.130	mg/Kg	1	✱	6010	Total/NA
Zinc	10.4	B	2.96	0.181	mg/Kg	1	✱	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-4 (7-8) (Continued)

Lab Sample ID: 480-50847-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	2.05		0.592	0.284	mg/Kg	1	☼	6010	Total/NA

Client Sample ID: WCSB-22 (2.5-3)

Lab Sample ID: 480-50847-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	27.5		3.61	1.86	mg/Kg	100	☼	8082	Total/NA
Anthracene	0.232	J	0.518	0.0984	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]anthracene	1.99		0.518	0.0787	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]pyrene	2.41		0.518	0.0746	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	3.94		0.518	0.0735	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[g,h,i]perylene	1.43		0.518	0.0881	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[k]fluoranthene	1.54		0.518	0.0756	mg/Kg	1	☼	MA-EPH	Total/NA
Chrysene	2.37		0.518	0.0922	mg/Kg	1	☼	MA-EPH	Total/NA
Dibenz(a,h)anthracene	0.760	B	0.518	0.0725	mg/Kg	1	☼	MA-EPH	Total/NA
Fluoranthene	2.20		0.518	0.0912	mg/Kg	1	☼	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	1.52	B	0.518	0.0756	mg/Kg	1	☼	MA-EPH	Total/NA
Phenanthrene	0.732		0.518	0.104	mg/Kg	1	☼	MA-EPH	Total/NA
Pyrene	3.24		0.518	0.0943	mg/Kg	1	☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	80.9		5.18	2.07	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	66.0		5.18	2.07	mg/Kg	1	☼	MA-EPH	Total/NA
C9-C18 Aliphatics	3.64	J	5.18	2.07	mg/Kg	1	☼	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	58.6		5.52	5.52	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSB-21 (2.5-3)

Lab Sample ID: 480-50847-7

No Detections.

Client Sample ID: WCSB-19 (2.5-3)

Lab Sample ID: 480-50847-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	0.221	J B	0.535	0.0910	mg/Kg	1	☼	MA-EPH	Total/NA
Dibenz(a,h)anthracene	0.124	J B	0.535	0.0749	mg/Kg	1	☼	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	0.163	J B	0.535	0.0781	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSB-18 (2.5-3)

Lab Sample ID: 480-50847-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	69.4		18.1	9.34	mg/Kg	500	☼	8082	Total/NA

Client Sample ID: WCSB-17 (2.5-3)

Lab Sample ID: 480-50847-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	395		35.8	18.4	mg/Kg	1000	☼	8082	Total/NA
Anthracene	0.135	J	0.536	0.102	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]anthracene	0.476	J	0.536	0.0815	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]pyrene	1.08		0.536	0.0772	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	2.16		0.536	0.0761	mg/Kg	1	☼	MA-EPH	Total/NA
Chrysene	0.737		0.536	0.0954	mg/Kg	1	☼	MA-EPH	Total/NA
Dibenz(a,h)anthracene	1.84	B	0.536	0.0750	mg/Kg	1	☼	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-17 (2.5-3) (Continued)

Lab Sample ID: 480-50847-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	2.26		0.536	0.0943	mg/Kg	1	☼	MA-EPH	Total/NA
Phenanthrene	0.407	J	0.536	0.107	mg/Kg	1	☼	MA-EPH	Total/NA
Pyrene	0.616		0.536	0.0975	mg/Kg	1	☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	112		5.36	2.14	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	256		5.36	2.14	mg/Kg	1	☼	MA-EPH	Total/NA
C9-C18 Aliphatics	30.9		5.36	2.14	mg/Kg	1	☼	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	102		5.43	5.43	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSB-16 (6-7)

Lab Sample ID: 480-50847-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0118	J	0.304	0.00511	mg/Kg	1	☼	8260C	Total/NA
Carbon disulfide	0.00530		0.00304	0.00304	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.000619	J	0.00304	0.000419	mg/Kg	1	☼	8260C	Total/NA
Methyl tert-butyl ether	0.00268	J	0.00304	0.000596	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00249	J	0.00607	0.00102	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: WCSB-15 (0.5-1.5)

Lab Sample ID: 480-50847-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0113	J	0.238	0.00401	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.00608		0.00238	0.000328	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.0175		0.00476	0.000800	mg/Kg	1	☼	8260C	Total/NA
Naphthalene	0.00296	J	0.0238	0.000638	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00660		0.00238	0.000622	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.0137		0.00238	0.000639	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.137		0.00238	0.000360	mg/Kg	1	☼	8260C	Total/NA

Client Sample ID: WCSB-15 (2.5-3)

Lab Sample ID: 480-50847-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	1.32		0.374	0.193	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCSB-14 (7-8)

Lab Sample ID: 480-50847-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.00989	J	0.219	0.00369	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.00167	J	0.00219	0.000303	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.00581		0.00439	0.000737	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00244		0.00219	0.000573	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.0266		0.00219	0.000589	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.0104		0.00219	0.000332	mg/Kg	1	☼	8260C	Total/NA
Trichloroethene	0.00206	J	0.00219	0.000965	mg/Kg	1	☼	8260C	Total/NA
Anthracene	0.283	J	0.487	0.0925	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]pyrene	0.131	J	0.487	0.0701	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	0.0714	J	0.487	0.0691	mg/Kg	1	☼	MA-EPH	Total/NA
Fluoranthene	0.469	J	0.487	0.0857	mg/Kg	1	☼	MA-EPH	Total/NA
Phenanthrene	0.494		0.487	0.0974	mg/Kg	1	☼	MA-EPH	Total/NA
Pyrene	0.361	J	0.487	0.0886	mg/Kg	1	☼	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-14 (7-8) (Continued)

Lab Sample ID: 480-50847-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (unadjusted)	32.8		4.87	1.95	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	35.2		4.87	1.95	mg/Kg	1	☼	MA-EPH	Total/NA
C9-C18 Aliphatics	45.3		4.87	1.95	mg/Kg	1	☼	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	31.0		5.25	5.25	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSB-13 (2.5-3)

Lab Sample ID: 480-50847-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.480		0.192	0.0990	mg/Kg	5	☼	8082	Total/NA

Client Sample ID: WCSB-12 (2.5-3)

Lab Sample ID: 480-50847-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.0341	J	0.258	0.00435	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.00606		0.00258	0.000356	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.0203		0.00516	0.000867	mg/Kg	1	☼	8260C	Total/NA
o-Xylene	0.00738		0.00258	0.000674	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.132		0.00258	0.000693	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.0866		0.00258	0.000390	mg/Kg	1	☼	8260C	Total/NA
Trichloroethene	0.00476		0.00258	0.00114	mg/Kg	1	☼	8260C	Total/NA
PCB-1242	1220		375	148	mg/Kg	10000	☼	8082	Total/NA

Client Sample ID: WCSB-912 (2.5-3)

Lab Sample ID: 480-50847-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1242	2300		378	149	mg/Kg	10000	☼	8082	Total/NA

Client Sample ID: WCSB-11 (6-7)

Lab Sample ID: 480-50847-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	4.67		1.09	0.435	mg/Kg	1	☼	6010	Total/NA
Barium	24.1		0.544	0.120	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.368		0.218	0.0305	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.249		0.218	0.0326	mg/Kg	1	☼	6010	Total/NA
Chromium	7.16		0.544	0.218	mg/Kg	1	☼	6010	Total/NA
Nickel	8.01		1.09	0.250	mg/Kg	1	☼	6010	Total/NA
Vanadium	5.68		0.544	0.120	mg/Kg	1	☼	6010	Total/NA
Zinc	88.3	B	2.72	0.166	mg/Kg	1	☼	6010	Total/NA
Lead	18.2		0.544	0.261	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0158	J	0.0976	0.00791	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: WCSB-7 (7-8)

Lab Sample ID: 480-50847-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1242	0.0258	J	0.0374	0.0147	mg/Kg	1	☼	8082	Total/NA
Arsenic	1.79		1.12	0.449	mg/Kg	1	☼	6010	Total/NA
Barium	14.1		0.561	0.123	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.263		0.225	0.0314	mg/Kg	1	☼	6010	Total/NA
Chromium	6.36		0.561	0.225	mg/Kg	1	☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-7 (7-8) (Continued)

Lab Sample ID: 480-50847-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Nickel	7.15		1.12	0.258	mg/Kg	1		☼	6010	Total/NA
Vanadium	13.8		0.561	0.123	mg/Kg	1		☼	6010	Total/NA
Zinc	43.0	B	2.81	0.172	mg/Kg	1		☼	6010	Total/NA
Lead	7.65		0.561	0.269	mg/Kg	1		☼	6010	Total/NA
Mercury	0.0133	J	0.108	0.00874	mg/Kg	1		☼	7471A	Total/NA

Client Sample ID: TB-11222013 (2)

Lab Sample ID: 480-50847-27

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-20 (14-15)

Lab Sample ID: 480-50847-1

Date Collected: 11/22/13 12:15

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 85.1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<19.2		19.2	12.2	mg/Kg	☆	11/29/13 07:58	12/05/13 12:42	500
PCB-1221	<19.2		19.2	9.33	mg/Kg	☆	11/29/13 07:58	12/05/13 12:42	500
PCB-1232	<19.2		19.2	8.17	mg/Kg	☆	11/29/13 07:58	12/05/13 12:42	500
PCB-1242	<19.2		19.2	7.58	mg/Kg	☆	11/29/13 07:58	12/05/13 12:42	500
PCB-1248	<19.2		19.2	9.92	mg/Kg	☆	11/29/13 07:58	12/05/13 12:42	500
PCB-1254	<19.2		19.2	9.92	mg/Kg	☆	11/29/13 07:58	12/05/13 12:42	500
PCB-1260	47.4		19.2	9.92	mg/Kg	☆	11/29/13 07:58	12/05/13 12:42	500
PCB-1262	<19.2		19.2	15.7	mg/Kg	☆	11/29/13 07:58	12/05/13 12:42	500
PCB-1268	<19.2		19.2	8.17	mg/Kg	☆	11/29/13 07:58	12/05/13 12:42	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	23293	X	30 - 150	11/29/13 07:58	12/05/13 12:42	500
Tetrachloro-m-xylene	5384	X	30 - 150	11/29/13 07:58	12/05/13 12:42	500
DCB Decachlorobiphenyl	17635	X	30 - 150	11/29/13 07:58	12/05/13 12:42	500
DCB Decachlorobiphenyl	12695	X	30 - 150	11/29/13 07:58	12/05/13 12:42	500

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3.86		0.580	0.0939	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Acenaphthylene	3.90		0.580	0.104	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Anthracene	7.75		0.580	0.110	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Benzo[a]anthracene	7.27		0.580	0.0881	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Benzo[a]pyrene	5.81		0.580	0.0835	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Benzo[b]fluoranthene	6.40		0.580	0.0823	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Benzo[g,h,i]perylene	2.38		0.580	0.0986	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Benzo[k]fluoranthene	4.12		0.580	0.0847	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
2-Methylnaphthalene	4.50		0.580	0.114	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Chrysene	10.3		0.580	0.103	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Dibenz(a,h)anthracene	2.18	B	0.580	0.0812	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Fluoranthene	18.7		0.580	0.102	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Fluorene	7.08		0.580	0.116	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Indeno[1,2,3-cd]pyrene	2.70	B	0.580	0.0847	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Naphthalene	0.760		0.580	0.0974	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Phenanthrene	16.2		0.580	0.116	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
Pyrene	12.6		0.580	0.106	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
C11-C22 Aromatics (unadjusted)	721		5.80	2.32	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
C19-C36 Aliphatics	283		5.80	2.32	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1
C9-C18 Aliphatics	193		5.80	2.32	mg/Kg	☆	11/26/13 10:37	11/29/13 17:51	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	605		5.87	5.87	mg/Kg	☆		12/03/13 12:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	35	X	40 - 140	11/26/13 10:37	11/29/13 17:51	1
2-Bromonaphthalene	102		40 - 140	11/26/13 10:37	11/29/13 17:51	1
2-Fluorobiphenyl	100		40 - 140	11/26/13 10:37	11/29/13 17:51	1
o-Terphenyl	37	X	40 - 140	11/26/13 10:37	11/29/13 17:51	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-4 (1-2)

Lab Sample ID: 480-50847-3

Date Collected: 11/22/13 13:05

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.3

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00300		0.00300	0.000601	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,1,1-Trichloroethane	<0.00300		0.00300	0.000436	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,1,2,2-Tetrachloroethane	<0.00300		0.00300	0.000974	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,1,2-Trichloroethane	<0.00300		0.00300	0.000781	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,1-Dichloroethane	<0.00300		0.00300	0.000733	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,1-Dichloroethene	<0.00300		0.00300	0.000735	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,1-Dichloropropene	<0.00300		0.00300	0.000853	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,2,3-Trichlorobenzene	<0.00300		0.00300	0.000638	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,2,3-Trichloropropane	<0.00300		0.00300	0.000612	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,2,4-Trichlorobenzene	<0.00300		0.00300	0.000365	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,2,4-Trimethylbenzene	0.0579		0.00300	0.00115	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,2-Dibromo-3-Chloropropane	<0.0300		0.0300	0.00300	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,2-Dichlorobenzene	<0.00300		0.00300	0.000470	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,2-Dichloroethane	<0.00300		0.00300	0.000302	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,2-Dichloropropane	<0.00300		0.00300	0.00300	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,3,5-Trimethylbenzene	0.0168		0.00300	0.000387	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,3-Dichlorobenzene	<0.00300		0.00300	0.000309	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,3-Dichloropropane	<0.00300		0.00300	0.000360	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,4-Dichlorobenzene	<0.00300		0.00300	0.000841	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
1,4-Dioxane	<0.300		0.300	0.0290	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
2,2-Dichloropropane	<0.00300		0.00300	0.00102	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
2-Butanone (MEK)	0.0712	*	0.0300	0.00220	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
2-Chlorotoluene	<0.00300		0.00300	0.000394	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
2-Hexanone	<0.0300		0.0300	0.00300	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
4-Chlorotoluene	<0.00300		0.00300	0.000709	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
4-Isopropyltoluene	<0.00300		0.00300	0.000482	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
4-Methyl-2-pentanone (MIBK)	0.0664		0.0300	0.00197	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Acetone	0.0723	J	0.300	0.00506	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Benzene	0.00380		0.00300	0.000294	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Bromobenzene	<0.00300		0.00300	0.00106	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Bromoform	<0.00300		0.00300	0.00300	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Bromomethane	<0.00601		0.00601	0.000541	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Carbon disulfide	<0.00300		0.00300	0.00300	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Carbon tetrachloride	<0.00300		0.00300	0.000582	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Chlorobenzene	<0.00300		0.00300	0.000793	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Chlorobromomethane	<0.00300		0.00300	0.000434	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Chlorodibromomethane	<0.00300		0.00300	0.000769	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Chloroethane	<0.00601		0.00601	0.00136	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Chloroform	<0.00300		0.00300	0.000371	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Chloromethane	<0.00601		0.00601	0.000363	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
cis-1,2-Dichloroethene	<0.00300		0.00300	0.000769	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
cis-1,3-Dichloropropene	<0.00300		0.00300	0.000865	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Dichlorobromomethane	<0.00300		0.00300	0.000805	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Dichlorodifluoromethane	<0.00601		0.00601	0.000496	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Ethyl ether	<0.00300		0.00300	0.00252	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Ethylene Dibromide	<0.00300		0.00300	0.000771	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Hexachlorobutadiene	<0.00300		0.00300	0.000704	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Isopropyl ether	<0.00300		0.00300	0.00300	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Isopropylbenzene	0.00713		0.00300	0.000906	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-4 (1-2)

Lab Sample ID: 480-50847-3

Date Collected: 11/22/13 13:05

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	<0.00300		0.00300	0.000590	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Methylene Chloride	<0.00300		0.00300	0.00276	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Naphthalene	<0.0300		0.0300	0.000805	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
n-Butylbenzene	<0.00300		0.00300	0.000523	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
N-Propylbenzene	0.0111		0.00300	0.000481	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
sec-Butylbenzene	<0.00300		0.00300	0.000523	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Styrene	<0.00300		0.00300	0.000300	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Tert-amyl methyl ether	<0.00300		0.00300	0.00154	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Tert-butyl ethyl ether	<0.00300		0.00300	0.00264	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
tert-Butylbenzene	<0.00300		0.00300	0.000625	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Tetrachloroethene	<0.00300		0.00300	0.000806	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Tetrahydrofuran	<0.0601		0.0601	0.00553	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
trans-1,2-Dichloroethene	<0.00300		0.00300	0.000620	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
trans-1,3-Dichloropropene	<0.00300		0.00300	0.00264	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Trichloroethene	<0.00300		0.00300	0.00132	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Trichlorofluoromethane	0.00288	J	0.00601	0.000568	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Vinyl chloride	<0.00300		0.00300	0.000733	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1
Dibromomethane	<0.00300		0.00300	0.000619	mg/Kg	☼	11/26/13 10:30	11/26/13 16:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	123		70 - 130	11/26/13 10:30	11/26/13 16:47	1
1,2-Dichloroethane-d4 (Surr)	107		70 - 130	11/26/13 10:30	11/26/13 16:47	1
4-Bromofluorobenzene (Surr)	127		70 - 130	11/26/13 10:30	11/26/13 16:47	1

Method: 8260C - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	0.322		0.0712	0.00982	mg/Kg	☼	11/27/13 11:06	11/27/13 19:46	1
m-Xylene & p-Xylene	1.43		0.142	0.0239	mg/Kg	☼	11/27/13 11:06	11/27/13 19:46	1
o-Xylene	0.531		0.0712	0.0186	mg/Kg	☼	11/27/13 11:06	11/27/13 19:46	1
Toluene	1.11		0.0712	0.0108	mg/Kg	☼	11/27/13 11:06	11/27/13 19:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	61	X	70 - 130	11/27/13 11:06	11/27/13 19:46	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130	11/27/13 11:06	11/27/13 19:46	1
4-Bromofluorobenzene (Surr)	55	X	70 - 130	11/27/13 11:06	11/27/13 19:46	1

Client Sample ID: WCSB-4 (7-8)

Lab Sample ID: 480-50847-4

Date Collected: 11/22/13 13:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 80.0

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.592		0.592	0.237	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1
Arsenic	<1.18		1.18	0.474	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1
Barium	10.4		0.592	0.130	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1
Beryllium	0.0806	J	0.237	0.0332	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1
Cadmium	<0.237		0.237	0.0355	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1
Chromium	4.02		0.592	0.237	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1
Nickel	3.00		1.18	0.273	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1
Thallium	<1.18		1.18	0.355	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-4 (7-8)

Lab Sample ID: 480-50847-4

Date Collected: 11/22/13 13:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 80.0

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	5.44		0.592	0.130	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1
Zinc	10.4	B	2.96	0.181	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1
Lead	2.05		0.592	0.284	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1
Selenium	<0.592		0.592	0.474	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1
Antimony	<0.592		0.592	0.474	mg/Kg	☼	11/27/13 15:15	11/30/13 19:58	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.129		0.129	0.0104	mg/Kg	☼	11/29/13 08:40	11/29/13 16:06	1

Client Sample ID: WCSB-22 (2.5-3)

Lab Sample ID: 480-50847-5

Date Collected: 11/22/13 13:30

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.6

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<3.61		3.61	2.30	mg/Kg	☼	11/29/13 07:58	12/03/13 19:27	100
PCB-1221	<3.61		3.61	1.75	mg/Kg	☼	11/29/13 07:58	12/03/13 19:27	100
PCB-1232	<3.61		3.61	1.53	mg/Kg	☼	11/29/13 07:58	12/03/13 19:27	100
PCB-1242	<3.61		3.61	1.42	mg/Kg	☼	11/29/13 07:58	12/03/13 19:27	100
PCB-1248	<3.61		3.61	1.86	mg/Kg	☼	11/29/13 07:58	12/03/13 19:27	100
PCB-1254	<3.61		3.61	1.86	mg/Kg	☼	11/29/13 07:58	12/03/13 19:27	100
PCB-1260	27.5		3.61	1.86	mg/Kg	☼	11/29/13 07:58	12/03/13 19:27	100
PCB-1262	<3.61		3.61	2.95	mg/Kg	☼	11/29/13 07:58	12/03/13 19:27	100
PCB-1268	<3.61		3.61	1.53	mg/Kg	☼	11/29/13 07:58	12/03/13 19:27	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 07:58	12/03/13 19:27	100
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 07:58	12/03/13 19:27	100
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 07:58	12/03/13 19:27	100
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 07:58	12/03/13 19:27	100

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.518		0.518	0.0839	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Acenaphthylene	<0.518		0.518	0.0932	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Anthracene	0.232	J	0.518	0.0984	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Benzo[a]anthracene	1.99		0.518	0.0787	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Benzo[a]pyrene	2.41		0.518	0.0746	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Benzo[b]fluoranthene	3.94		0.518	0.0735	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Benzo[g,h,i]perylene	1.43		0.518	0.0881	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Benzo[k]fluoranthene	1.54		0.518	0.0756	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
2-Methylnaphthalene	<0.518		0.518	0.102	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Chrysene	2.37		0.518	0.0922	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Dibenz[a,h]anthracene	0.760	B	0.518	0.0725	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Fluoranthene	2.20		0.518	0.0912	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Fluorene	<0.518		0.518	0.104	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Indeno[1,2,3-cd]pyrene	1.52	B	0.518	0.0756	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Naphthalene	<0.518		0.518	0.0870	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1
Phenanthrene	0.732		0.518	0.104	mg/Kg	☼	11/26/13 10:37	11/29/13 18:21	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-22 (2.5-3)

Lab Sample ID: 480-50847-5

Date Collected: 11/22/13 13:30

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 90.6

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	3.24		0.518	0.0943	mg/Kg	☆	11/26/13 10:37	11/29/13 18:21	1
C11-C22 Aromatics (unadjusted)	80.9		5.18	2.07	mg/Kg	☆	11/26/13 10:37	11/29/13 18:21	1
C19-C36 Aliphatics	66.0		5.18	2.07	mg/Kg	☆	11/26/13 10:37	11/29/13 18:21	1
C9-C18 Aliphatics	3.64 J		5.18	2.07	mg/Kg	☆	11/26/13 10:37	11/29/13 18:21	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	58.6		5.52	5.52	mg/Kg	☆		12/03/13 12:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	73		40 - 140	11/26/13 10:37	11/29/13 18:21	1
2-Bromonaphthalene	72		40 - 140	11/26/13 10:37	11/29/13 18:21	1
2-Fluorobiphenyl	89		40 - 140	11/26/13 10:37	11/29/13 18:21	1
o-Terphenyl	66		40 - 140	11/26/13 10:37	11/29/13 18:21	1

Client Sample ID: WCSB-21 (2.5-3)

Lab Sample ID: 480-50847-7

Date Collected: 11/22/13 13:55

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 95.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0348		0.0348	0.0221	mg/Kg	☆	11/29/13 07:58	12/03/13 19:43	1
PCB-1221	<0.0348		0.0348	0.0169	mg/Kg	☆	11/29/13 07:58	12/03/13 19:43	1
PCB-1232	<0.0348		0.0348	0.0148	mg/Kg	☆	11/29/13 07:58	12/03/13 19:43	1
PCB-1242	<0.0348		0.0348	0.0137	mg/Kg	☆	11/29/13 07:58	12/03/13 19:43	1
PCB-1248	<0.0348		0.0348	0.0179	mg/Kg	☆	11/29/13 07:58	12/03/13 19:43	1
PCB-1254	<0.0348		0.0348	0.0179	mg/Kg	☆	11/29/13 07:58	12/03/13 19:43	1
PCB-1260	<0.0348		0.0348	0.0179	mg/Kg	☆	11/29/13 07:58	12/03/13 19:43	1
PCB-1262	<0.0348		0.0348	0.0285	mg/Kg	☆	11/29/13 07:58	12/03/13 19:43	1
PCB-1268	<0.0348		0.0348	0.0148	mg/Kg	☆	11/29/13 07:58	12/03/13 19:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	83		30 - 150	11/29/13 07:58	12/03/13 19:43	1
Tetrachloro-m-xylene	85		30 - 150	11/29/13 07:58	12/03/13 19:43	1
DCB Decachlorobiphenyl	88		30 - 150	11/29/13 07:58	12/03/13 19:43	1
DCB Decachlorobiphenyl	66		30 - 150	11/29/13 07:58	12/03/13 19:43	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.517		0.517	0.0838	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1
Acenaphthylene	<0.517		0.517	0.0931	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1
Anthracene	<0.517		0.517	0.0982	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1
Benzo[a]anthracene	<0.517		0.517	0.0786	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1
Benzo[a]pyrene	<0.517		0.517	0.0745	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1
Benzo[b]fluoranthene	<0.517		0.517	0.0734	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1
Benzo[g,h,i]perylene	<0.517		0.517	0.0879	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1
Benzo[k]fluoranthene	<0.517		0.517	0.0755	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1
2-Methylnaphthalene	<0.517		0.517	0.101	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1
Chrysene	<0.517		0.517	0.0920	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1
Dibenz(a,h)anthracene	<0.517		0.517	0.0724	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1
Fluoranthene	<0.517		0.517	0.0910	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1
Fluorene	<0.517		0.517	0.103	mg/Kg	☆	11/26/13 10:37	11/29/13 18:50	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-21 (2.5-3)

Lab Sample ID: 480-50847-7

Date Collected: 11/22/13 13:55

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 95.0

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.517		0.517	0.0755	mg/Kg	☼	11/26/13 10:37	11/29/13 18:50	1
Naphthalene	<0.517		0.517	0.0869	mg/Kg	☼	11/26/13 10:37	11/29/13 18:50	1
Phenanthrene	<0.517		0.517	0.103	mg/Kg	☼	11/26/13 10:37	11/29/13 18:50	1
Pyrene	<0.517		0.517	0.0941	mg/Kg	☼	11/26/13 10:37	11/29/13 18:50	1
C11-C22 Aromatics (unadjusted)	<5.17		5.17	2.07	mg/Kg	☼	11/26/13 10:37	11/29/13 18:50	1
C19-C36 Aliphatics	<5.17		5.17	2.07	mg/Kg	☼	11/26/13 10:37	11/29/13 18:50	1
C9-C18 Aliphatics	<5.17		5.17	2.07	mg/Kg	☼	11/26/13 10:37	11/29/13 18:50	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<5.26		5.26	5.26	mg/Kg	☼		12/03/13 12:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	83		40 - 140	11/26/13 10:37	11/29/13 18:50	1
2-Bromonaphthalene	75		40 - 140	11/26/13 10:37	11/29/13 18:50	1
2-Fluorobiphenyl	91		40 - 140	11/26/13 10:37	11/29/13 18:50	1
o-Terphenyl	72		40 - 140	11/26/13 10:37	11/29/13 18:50	1

Client Sample ID: WCSB-19 (2.5-3)

Lab Sample ID: 480-50847-9

Date Collected: 11/22/13 14:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 89.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0373		0.0373	0.0237	mg/Kg	☼	11/29/13 07:58	12/03/13 19:59	1
PCB-1221	<0.0373		0.0373	0.0181	mg/Kg	☼	11/29/13 07:58	12/03/13 19:59	1
PCB-1232	<0.0373		0.0373	0.0158	mg/Kg	☼	11/29/13 07:58	12/03/13 19:59	1
PCB-1242	<0.0373		0.0373	0.0147	mg/Kg	☼	11/29/13 07:58	12/03/13 19:59	1
PCB-1248	<0.0373		0.0373	0.0192	mg/Kg	☼	11/29/13 07:58	12/03/13 19:59	1
PCB-1254	<0.0373		0.0373	0.0192	mg/Kg	☼	11/29/13 07:58	12/03/13 19:59	1
PCB-1260	<0.0373		0.0373	0.0192	mg/Kg	☼	11/29/13 07:58	12/03/13 19:59	1
PCB-1262	<0.0373		0.0373	0.0305	mg/Kg	☼	11/29/13 07:58	12/03/13 19:59	1
PCB-1268	<0.0373		0.0373	0.0158	mg/Kg	☼	11/29/13 07:58	12/03/13 19:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		30 - 150	11/29/13 07:58	12/03/13 19:59	1
Tetrachloro-m-xylene	90		30 - 150	11/29/13 07:58	12/03/13 19:59	1
DCB Decachlorobiphenyl	77		30 - 150	11/29/13 07:58	12/03/13 19:59	1
DCB Decachlorobiphenyl	58		30 - 150	11/29/13 07:58	12/03/13 19:59	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.535		0.535	0.0867	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Acenaphthylene	<0.535		0.535	0.0963	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Anthracene	<0.535		0.535	0.102	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Benzo[a]anthracene	<0.535		0.535	0.0813	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Benzo[a]pyrene	<0.535		0.535	0.0771	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Benzo[b]fluoranthene	<0.535		0.535	0.0760	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Benzo[g,h,i]perylene	0.221	J B	0.535	0.0910	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Benzo[k]fluoranthene	<0.535		0.535	0.0781	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
2-Methylnaphthalene	<0.535		0.535	0.105	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Chrysene	<0.535		0.535	0.0952	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-19 (2.5-3)

Lab Sample ID: 480-50847-9

Date Collected: 11/22/13 14:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 89.3

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	0.124	J B	0.535	0.0749	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Fluoranthene	<0.535		0.535	0.0942	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Fluorene	<0.535		0.535	0.107	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Indeno[1,2,3-cd]pyrene	0.163	J B	0.535	0.0781	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Naphthalene	<0.535	*	0.535	0.0899	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Phenanthrene	<0.535		0.535	0.107	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
Pyrene	<0.535		0.535	0.0974	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
C11-C22 Aromatics (unadjusted)	<5.35		5.35	2.14	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
C19-C36 Aliphatics	<5.35		5.35	2.14	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1
C9-C18 Aliphatics	<5.35		5.35	2.14	mg/Kg	☼	12/02/13 09:26	12/04/13 10:54	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<5.60		5.60	5.60	mg/Kg	☼		12/03/13 12:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	85		40 - 140	12/02/13 09:26	12/04/13 10:54	1
2-Bromonaphthalene	76		40 - 140	12/02/13 09:26	12/04/13 10:54	1
2-Fluorobiphenyl	94		40 - 140	12/02/13 09:26	12/04/13 10:54	1
o-Terphenyl	71		40 - 140	12/02/13 09:26	12/04/13 10:54	1

Client Sample ID: WCSB-18 (2.5-3)

Lab Sample ID: 480-50847-11

Date Collected: 11/22/13 14:20

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 92.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<18.1		18.1	11.5	mg/Kg	☼	11/29/13 07:58	12/03/13 20:46	500
PCB-1221	<18.1		18.1	8.79	mg/Kg	☼	11/29/13 07:58	12/03/13 20:46	500
PCB-1232	<18.1		18.1	7.69	mg/Kg	☼	11/29/13 07:58	12/03/13 20:46	500
PCB-1242	<18.1		18.1	7.14	mg/Kg	☼	11/29/13 07:58	12/03/13 20:46	500
PCB-1248	<18.1		18.1	9.34	mg/Kg	☼	11/29/13 07:58	12/03/13 20:46	500
PCB-1254	<18.1		18.1	9.34	mg/Kg	☼	11/29/13 07:58	12/03/13 20:46	500
PCB-1260	69.4		18.1	9.34	mg/Kg	☼	11/29/13 07:58	12/03/13 20:46	500
PCB-1262	<18.1		18.1	14.8	mg/Kg	☼	11/29/13 07:58	12/03/13 20:46	500
PCB-1268	<18.1		18.1	7.69	mg/Kg	☼	11/29/13 07:58	12/03/13 20:46	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 07:58	12/03/13 20:46	500
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 07:58	12/03/13 20:46	500
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 07:58	12/03/13 20:46	500
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 07:58	12/03/13 20:46	500

Client Sample ID: WCSB-17 (2.5-3)

Lab Sample ID: 480-50847-13

Date Collected: 11/22/13 14:35

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 92.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<35.8		35.8	22.8	mg/Kg	☼	11/29/13 07:58	12/03/13 20:15	1000
PCB-1221	<35.8		35.8	17.4	mg/Kg	☼	11/29/13 07:58	12/03/13 20:15	1000
PCB-1232	<35.8		35.8	15.2	mg/Kg	☼	11/29/13 07:58	12/03/13 20:15	1000

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-17 (2.5-3)

Lab Sample ID: 480-50847-13

Date Collected: 11/22/13 14:35

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 92.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1242	<35.8		35.8	14.1	mg/Kg	☼	11/29/13 07:58	12/03/13 20:15	1000
PCB-1248	<35.8		35.8	18.4	mg/Kg	☼	11/29/13 07:58	12/03/13 20:15	1000
PCB-1254	<35.8		35.8	18.4	mg/Kg	☼	11/29/13 07:58	12/03/13 20:15	1000
PCB-1260	395		35.8	18.4	mg/Kg	☼	11/29/13 07:58	12/03/13 20:15	1000
PCB-1262	<35.8		35.8	29.3	mg/Kg	☼	11/29/13 07:58	12/03/13 20:15	1000
PCB-1268	<35.8		35.8	15.2	mg/Kg	☼	11/29/13 07:58	12/03/13 20:15	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 07:58	12/03/13 20:15	1000
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 07:58	12/03/13 20:15	1000
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 07:58	12/03/13 20:15	1000
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 07:58	12/03/13 20:15	1000

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.536		0.536	0.0868	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Acenaphthylene	<0.536		0.536	0.0965	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Anthracene	0.135	J	0.536	0.102	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Benzo[a]anthracene	0.476	J	0.536	0.0815	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Benzo[a]pyrene	1.08		0.536	0.0772	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Benzo[b]fluoranthene	2.16		0.536	0.0761	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Benzo[g,h,i]perylene	<0.536		0.536	0.0911	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Benzo[k]fluoranthene	<0.536		0.536	0.0782	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
2-Methylnaphthalene	<0.536		0.536	0.105	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Chrysene	0.737		0.536	0.0954	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Dibenz(a,h)anthracene	1.84	B	0.536	0.0750	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Fluoranthene	2.26		0.536	0.0943	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Fluorene	<0.536		0.536	0.107	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Indeno[1,2,3-cd]pyrene	<0.536		0.536	0.0782	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Naphthalene	<0.536		0.536	0.0900	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Phenanthrene	0.407	J	0.536	0.107	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
Pyrene	0.616		0.536	0.0975	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
C11-C22 Aromatics (unadjusted)	112		5.36	2.14	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
C19-C36 Aliphatics	256		5.36	2.14	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1
C9-C18 Aliphatics	30.9		5.36	2.14	mg/Kg	☼	11/26/13 10:37	11/29/13 20:18	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	102		5.43	5.43	mg/Kg	☼		12/03/13 12:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	34	X	40 - 140	11/26/13 10:37	11/29/13 20:18	1
2-Bromonaphthalene	90		40 - 140	11/26/13 10:37	11/29/13 20:18	1
2-Fluorobiphenyl	107		40 - 140	11/26/13 10:37	11/29/13 20:18	1
o-Terphenyl	29	X	40 - 140	11/26/13 10:37	11/29/13 20:18	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-16 (6-7)

Lab Sample ID: 480-50847-15

Date Collected: 11/22/13 14:55

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 68.3

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00304		0.00304	0.000607	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,1,1-Trichloroethane	<0.00304		0.00304	0.000441	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,1,2,2-Tetrachloroethane	<0.00304		0.00304	0.000985	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,1,2-Trichloroethane	<0.00304		0.00304	0.000790	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,1-Dichloroethane	<0.00304		0.00304	0.000741	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,1-Dichloroethene	<0.00304		0.00304	0.000743	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,1-Dichloropropene	<0.00304		0.00304	0.000862	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,2,3-Trichlorobenzene	<0.00304		0.00304	0.000645	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,2,3-Trichloropropane	<0.00304		0.00304	0.000618	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,2,4-Trichlorobenzene	<0.00304		0.00304	0.000369	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,2,4-Trimethylbenzene	<0.00304		0.00304	0.00117	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,2-Dibromo-3-Chloropropane	<0.0304		0.0304	0.00304	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,2-Dichlorobenzene	<0.00304		0.00304	0.000475	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,2-Dichloroethane	<0.00304		0.00304	0.000305	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,2-Dichloropropane	<0.00304		0.00304	0.00304	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,3,5-Trimethylbenzene	<0.00304		0.00304	0.000391	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,3-Dichlorobenzene	<0.00304		0.00304	0.000312	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,3-Dichloropropane	<0.00304		0.00304	0.000364	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,4-Dichlorobenzene	<0.00304		0.00304	0.000850	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
1,4-Dioxane	<0.304		0.304	0.0293	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
2,2-Dichloropropane	<0.00304		0.00304	0.00103	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
2-Butanone (MEK)	<0.0304	*	0.0304	0.00222	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
2-Chlorotoluene	<0.00304		0.00304	0.000398	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
2-Hexanone	<0.0304		0.0304	0.00304	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
4-Chlorotoluene	<0.00304		0.00304	0.000717	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
4-Isopropyltoluene	<0.00304		0.00304	0.000487	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
4-Methyl-2-pentanone (MIBK)	<0.0304		0.0304	0.00199	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Acetone	0.0118	J	0.304	0.00511	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Benzene	<0.00304		0.00304	0.000298	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Bromobenzene	<0.00304		0.00304	0.00107	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Bromoform	<0.00304		0.00304	0.00304	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Bromomethane	<0.00607		0.00607	0.000547	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Carbon disulfide	0.00530		0.00304	0.00304	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Carbon tetrachloride	<0.00304		0.00304	0.000588	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Chlorobenzene	<0.00304		0.00304	0.000802	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Chlorobromomethane	<0.00304		0.00304	0.000439	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Chlorodibromomethane	<0.00304		0.00304	0.000777	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Chloroethane	<0.00607		0.00607	0.00137	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Chloroform	<0.00304		0.00304	0.000375	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Chloromethane	<0.00607		0.00607	0.000367	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
cis-1,2-Dichloroethene	<0.00304		0.00304	0.000777	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
cis-1,3-Dichloropropene	<0.00304		0.00304	0.000875	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Dichlorobromomethane	<0.00304		0.00304	0.000814	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Dichlorodifluoromethane	<0.00607		0.00607	0.000502	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Ethyl ether	<0.00304		0.00304	0.00255	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Ethylbenzene	0.000619	J	0.00304	0.000419	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Ethylene Dibromide	<0.00304		0.00304	0.000780	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Hexachlorobutadiene	<0.00304		0.00304	0.000712	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Isopropyl ether	<0.00304		0.00304	0.00304	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-16 (6-7)

Lab Sample ID: 480-50847-15

Date Collected: 11/22/13 14:55

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 68.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	<0.00304		0.00304	0.000916	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Methyl tert-butyl ether	0.00268	J	0.00304	0.000596	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Methylene Chloride	<0.00304		0.00304	0.00279	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
m-Xylene & p-Xylene	0.00249	J	0.00607	0.00102	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Naphthalene	<0.0304		0.0304	0.000814	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
n-Butylbenzene	<0.00304		0.00304	0.000528	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
N-Propylbenzene	<0.00304		0.00304	0.000486	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
o-Xylene	<0.00304		0.00304	0.000793	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
sec-Butylbenzene	<0.00304		0.00304	0.000528	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Styrene	<0.00304		0.00304	0.000304	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Tert-amyl methyl ether	<0.00304		0.00304	0.00155	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Tert-butyl ethyl ether	<0.00304		0.00304	0.00267	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
tert-Butylbenzene	<0.00304		0.00304	0.000632	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Tetrachloroethene	<0.00304		0.00304	0.000815	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Tetrahydrofuran	<0.0607		0.0607	0.00559	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Toluene	<0.00304		0.00304	0.000459	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
trans-1,2-Dichloroethene	<0.00304		0.00304	0.000627	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
trans-1,3-Dichloropropene	<0.00304		0.00304	0.00267	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Trichloroethene	<0.00304		0.00304	0.00134	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Trichlorofluoromethane	<0.00607		0.00607	0.000575	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Vinyl chloride	<0.00304		0.00304	0.000741	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1
Dibromomethane	<0.00304		0.00304	0.000626	mg/Kg	☼	11/26/13 10:30	11/26/13 17:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		70 - 130	11/26/13 10:30	11/26/13 17:13	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	11/26/13 10:30	11/26/13 17:13	1
4-Bromofluorobenzene (Surr)	98		70 - 130	11/26/13 10:30	11/26/13 17:13	1

Client Sample ID: WCSB-15 (0.5-1.5)

Lab Sample ID: 480-50847-16

Date Collected: 11/22/13 15:15

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 91.8

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00238		0.00238	0.000476	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,1,1-Trichloroethane	<0.00238		0.00238	0.000346	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,1,2,2-Tetrachloroethane	<0.00238		0.00238	0.000772	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,1,2-Trichloroethane	<0.00238		0.00238	0.000619	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,1-Dichloroethane	<0.00238		0.00238	0.000581	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,1-Dichloroethene	<0.00238		0.00238	0.000583	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,1-Dichloropropene	<0.00238		0.00238	0.000676	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,2,3-Trichlorobenzene	<0.00238		0.00238	0.000505	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,2,3-Trichloropropane	<0.00238		0.00238	0.000485	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,2,4-Trichlorobenzene	<0.00238		0.00238	0.000289	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,2,4-Trimethylbenzene	<0.00238		0.00238	0.000914	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,2-Dibromo-3-Chloropropane	<0.0238		0.0238	0.00238	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,2-Dichlorobenzene	<0.00238		0.00238	0.000372	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,2-Dichloroethane	<0.00238		0.00238	0.000239	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,2-Dichloropropane	<0.00238		0.00238	0.00238	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,3,5-Trimethylbenzene	<0.00238		0.00238	0.000307	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-15 (0.5-1.5)

Lab Sample ID: 480-50847-16

Date Collected: 11/22/13 15:15

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 91.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	<0.00238		0.00238	0.000245	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,3-Dichloropropane	<0.00238		0.00238	0.000286	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,4-Dichlorobenzene	<0.00238		0.00238	0.000666	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
1,4-Dioxane	<0.238		0.238	0.0229	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
2,2-Dichloropropane	<0.00238		0.00238	0.000809	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
2-Butanone (MEK)	<0.0238	*	0.0238	0.00174	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
2-Chlorotoluene	<0.00238		0.00238	0.000312	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
2-Hexanone	<0.0238		0.0238	0.00238	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
4-Chlorotoluene	<0.00238		0.00238	0.000562	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
4-Isopropyltoluene	<0.00238		0.00238	0.000382	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
4-Methyl-2-pentanone (MIBK)	<0.0238		0.0238	0.00156	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Acetone	0.0113	J	0.238	0.00401	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Benzene	<0.00238		0.00238	0.000233	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Bromobenzene	<0.00238		0.00238	0.000838	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Bromoform	<0.00238		0.00238	0.00238	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Bromomethane	<0.00476		0.00476	0.000428	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Carbon disulfide	<0.00238		0.00238	0.00238	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Carbon tetrachloride	<0.00238		0.00238	0.000461	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Chlorobenzene	<0.00238		0.00238	0.000628	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Chlorobromomethane	<0.00238		0.00238	0.000344	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Chlorodibromomethane	<0.00238		0.00238	0.000609	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Chloroethane	<0.00476		0.00476	0.00108	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Chloroform	<0.00238		0.00238	0.000294	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Chloromethane	<0.00476		0.00476	0.000287	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
cis-1,2-Dichloroethene	<0.00238		0.00238	0.000609	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
cis-1,3-Dichloropropene	<0.00238		0.00238	0.000685	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Dichlorobromomethane	<0.00238		0.00238	0.000638	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Dichlorodifluoromethane	<0.00476		0.00476	0.000393	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Ethyl ether	<0.00238		0.00238	0.00200	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Ethylbenzene	0.00608		0.00238	0.000328	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Ethylene Dibromide	<0.00238		0.00238	0.000611	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Hexachlorobutadiene	<0.00238		0.00238	0.000558	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Isopropyl ether	<0.00238		0.00238	0.00238	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Isopropylbenzene	<0.00238		0.00238	0.000718	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Methyl tert-butyl ether	<0.00238		0.00238	0.000467	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Methylene Chloride	<0.00238		0.00238	0.00219	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
m-Xylene & p-Xylene	0.0175		0.00476	0.000800	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Naphthalene	0.00296	J	0.0238	0.000638	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
n-Butylbenzene	<0.00238		0.00238	0.000414	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
N-Propylbenzene	<0.00238		0.00238	0.000381	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
o-Xylene	0.00660		0.00238	0.000622	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
sec-Butylbenzene	<0.00238		0.00238	0.000414	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Styrene	<0.00238		0.00238	0.000238	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Tert-amyl methyl ether	<0.00238		0.00238	0.00122	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Tert-butyl ethyl ether	<0.00238		0.00238	0.00209	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
tert-Butylbenzene	<0.00238		0.00238	0.000495	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Tetrachloroethene	0.0137		0.00238	0.000639	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Tetrahydrofuran	<0.0476		0.0476	0.00438	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Toluene	0.137		0.00238	0.000360	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-15 (0.5-1.5)

Date Collected: 11/22/13 15:15

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-16

Matrix: Solid

Percent Solids: 91.8

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	<0.00238		0.00238	0.000491	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
trans-1,3-Dichloropropene	<0.00238		0.00238	0.00209	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Trichloroethene	<0.00238		0.00238	0.00105	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Trichlorofluoromethane	<0.00476		0.00476	0.000450	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Vinyl chloride	<0.00238		0.00238	0.000581	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1
Dibromomethane	<0.00238		0.00238	0.000490	mg/Kg	☼	11/26/13 10:30	11/26/13 17:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130	11/26/13 10:30	11/26/13 17:38	1
1,2-Dichloroethane-d4 (Surr)	105		70 - 130	11/26/13 10:30	11/26/13 17:38	1
4-Bromofluorobenzene (Surr)	94		70 - 130	11/26/13 10:30	11/26/13 17:38	1

Client Sample ID: WCSB-15 (2.5-3)

Date Collected: 11/22/13 15:17

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-17

Matrix: Solid

Percent Solids: 88.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.374		0.374	0.238	mg/Kg	☼	11/29/13 08:08	12/05/13 04:16	10
PCB-1221	<0.374		0.374	0.181	mg/Kg	☼	11/29/13 08:08	12/05/13 04:16	10
PCB-1232	<0.374		0.374	0.159	mg/Kg	☼	11/29/13 08:08	12/05/13 04:16	10
PCB-1242	<0.374		0.374	0.147	mg/Kg	☼	11/29/13 08:08	12/05/13 04:16	10
PCB-1248	<0.374		0.374	0.193	mg/Kg	☼	11/29/13 08:08	12/05/13 04:16	10
PCB-1254	<0.374		0.374	0.193	mg/Kg	☼	11/29/13 08:08	12/05/13 04:16	10
PCB-1260	1.32		0.374	0.193	mg/Kg	☼	11/29/13 08:08	12/05/13 04:16	10
PCB-1262	<0.374		0.374	0.306	mg/Kg	☼	11/29/13 08:08	12/05/13 04:16	10
PCB-1268	<0.374		0.374	0.159	mg/Kg	☼	11/29/13 08:08	12/05/13 04:16	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 08:08	12/05/13 04:16	10
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 08:08	12/05/13 04:16	10
DCB Decachlorobiphenyl	460	X	30 - 150	11/29/13 08:08	12/05/13 04:16	10
DCB Decachlorobiphenyl	118		30 - 150	11/29/13 08:08	12/05/13 04:16	10

Client Sample ID: WCSB-14 (7-8)

Date Collected: 11/22/13 15:30

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-19

Matrix: Solid

Percent Solids: 95.3

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00219		0.00219	0.000439	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,1,1-Trichloroethane	<0.00219		0.00219	0.000319	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,1,2,2-Tetrachloroethane	<0.00219		0.00219	0.000712	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,1,2-Trichloroethane	<0.00219		0.00219	0.000570	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,1-Dichloroethane	<0.00219		0.00219	0.000535	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,1-Dichloroethene	<0.00219		0.00219	0.000537	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,1-Dichloropropene	<0.00219		0.00219	0.000623	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,2,3-Trichlorobenzene	<0.00219		0.00219	0.000466	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,2,3-Trichloropropane	<0.00219		0.00219	0.000447	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,2,4-Trichlorobenzene	<0.00219		0.00219	0.000267	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-14 (7-8)

Lab Sample ID: 480-50847-19

Date Collected: 11/22/13 15:30

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 95.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.00219		0.00219	0.000842	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,2-Dibromo-3-Chloropropane	<0.0219		0.0219	0.00219	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,2-Dichlorobenzene	<0.00219		0.00219	0.000343	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,2-Dichloroethane	<0.00219		0.00219	0.000220	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,2-Dichloropropane	<0.00219		0.00219	0.00219	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,3,5-Trimethylbenzene	<0.00219		0.00219	0.000283	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,3-Dichlorobenzene	<0.00219		0.00219	0.000226	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,3-Dichloropropane	<0.00219		0.00219	0.000263	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,4-Dichlorobenzene	<0.00219		0.00219	0.000614	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
1,4-Dioxane	<0.219		0.219	0.0212	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
2,2-Dichloropropane	<0.00219		0.00219	0.000746	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
2-Butanone (MEK)	<0.0219	*	0.0219	0.00161	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
2-Chlorotoluene	<0.00219		0.00219	0.000288	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
2-Hexanone	<0.0219		0.0219	0.00219	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
4-Chlorotoluene	<0.00219		0.00219	0.000518	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
4-Isopropyltoluene	<0.00219		0.00219	0.000352	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
4-Methyl-2-pentanone (MIBK)	<0.0219		0.0219	0.00144	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Acetone	0.00989	J	0.219	0.00369	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Benzene	<0.00219		0.00219	0.000215	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Bromobenzene	<0.00219		0.00219	0.000772	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Bromoform	<0.00219		0.00219	0.00219	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Bromomethane	<0.00439		0.00439	0.000395	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Carbon disulfide	<0.00219		0.00219	0.00219	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Carbon tetrachloride	<0.00219		0.00219	0.000425	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Chlorobenzene	<0.00219		0.00219	0.000579	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Chlorobromomethane	<0.00219		0.00219	0.000317	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Chlorodibromomethane	<0.00219		0.00219	0.000562	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Chloroethane	<0.00439		0.00439	0.000992	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Chloroform	<0.00219		0.00219	0.000271	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Chloromethane	<0.00439		0.00439	0.000265	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
cis-1,2-Dichloroethene	<0.00219		0.00219	0.000562	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
cis-1,3-Dichloropropene	<0.00219		0.00219	0.000632	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Dichlorobromomethane	<0.00219		0.00219	0.000588	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Dichlorodifluoromethane	<0.00439		0.00439	0.000362	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Ethyl ether	<0.00219		0.00219	0.00184	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Ethylbenzene	0.00167	J	0.00219	0.000303	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Ethylene Dibromide	<0.00219		0.00219	0.000563	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Hexachlorobutadiene	<0.00219		0.00219	0.000514	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Isopropyl ether	<0.00219		0.00219	0.00219	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Isopropylbenzene	<0.00219		0.00219	0.000662	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Methyl tert-butyl ether	<0.00219		0.00219	0.000431	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Methylene Chloride	<0.00219		0.00219	0.00202	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
m-Xylene & p-Xylene	0.00581		0.00439	0.000737	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Naphthalene	<0.0219		0.0219	0.000588	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
n-Butylbenzene	<0.00219		0.00219	0.000382	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
N-Propylbenzene	<0.00219		0.00219	0.000351	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
o-Xylene	0.00244		0.00219	0.000573	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
sec-Butylbenzene	<0.00219		0.00219	0.000382	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Styrene	<0.00219		0.00219	0.000219	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-14 (7-8)

Lab Sample ID: 480-50847-19

Date Collected: 11/22/13 15:30

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 95.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	<0.00219		0.00219	0.00112	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Tert-butyl ethyl ether	<0.00219		0.00219	0.00193	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
tert-Butylbenzene	<0.00219		0.00219	0.000456	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Tetrachloroethene	0.0266		0.00219	0.000589	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Tetrahydrofuran	<0.0439		0.0439	0.00404	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Toluene	0.0104		0.00219	0.000332	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
trans-1,2-Dichloroethene	<0.00219		0.00219	0.000453	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
trans-1,3-Dichloropropene	<0.00219		0.00219	0.00193	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Trichloroethene	0.00206 J		0.00219	0.000965	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Trichlorofluoromethane	<0.00439		0.00439	0.000415	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Vinyl chloride	<0.00219		0.00219	0.000535	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1
Dibromomethane	<0.00219		0.00219	0.000452	mg/Kg	☼	11/26/13 10:30	11/26/13 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130	11/26/13 10:30	11/26/13 18:04	1
1,2-Dichloroethane-d4 (Surr)	102		70 - 130	11/26/13 10:30	11/26/13 18:04	1
4-Bromofluorobenzene (Surr)	98		70 - 130	11/26/13 10:30	11/26/13 18:04	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.487		0.487	0.0789	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Acenaphthylene	<0.487		0.487	0.0876	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Anthracene	0.283 J		0.487	0.0925	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Benzo[a]anthracene	<0.487		0.487	0.0740	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Benzo[a]pyrene	0.131 J		0.487	0.0701	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Benzo[b]fluoranthene	0.0714 J		0.487	0.0691	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Benzo[g,h,i]perylene	<0.487		0.487	0.0828	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Benzo[k]fluoranthene	<0.487		0.487	0.0711	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
2-Methylnaphthalene	<0.487		0.487	0.0954	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Chrysene	<0.487		0.487	0.0867	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Dibenz(a,h)anthracene	<0.487		0.487	0.0682	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Fluoranthene	0.469 J		0.487	0.0857	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Fluorene	<0.487		0.487	0.0974	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Indeno[1,2,3-cd]pyrene	<0.487		0.487	0.0711	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Naphthalene	<0.487		0.487	0.0818	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Phenanthrene	0.494		0.487	0.0974	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
Pyrene	0.361 J		0.487	0.0886	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
C11-C22 Aromatics (unadjusted)	32.8		4.87	1.95	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
C19-C36 Aliphatics	35.2		4.87	1.95	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1
C9-C18 Aliphatics	45.3		4.87	1.95	mg/Kg	☼	11/26/13 10:37	11/29/13 20:48	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	31.0		5.25	5.25	mg/Kg	☼		12/03/13 12:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	78		40 - 140	11/26/13 10:37	11/29/13 20:48	1
2-Bromonaphthalene	71		40 - 140	11/26/13 10:37	11/29/13 20:48	1
2-Fluorobiphenyl	91		40 - 140	11/26/13 10:37	11/29/13 20:48	1
o-Terphenyl	76		40 - 140	11/26/13 10:37	11/29/13 20:48	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-13 (2.5-3)

Lab Sample ID: 480-50847-20

Date Collected: 11/22/13 15:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 85.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.192		0.192	0.122	mg/Kg	☼	11/29/13 08:08	12/05/13 04:30	5
PCB-1221	<0.192		0.192	0.0932	mg/Kg	☼	11/29/13 08:08	12/05/13 04:30	5
PCB-1232	<0.192		0.192	0.0815	mg/Kg	☼	11/29/13 08:08	12/05/13 04:30	5
PCB-1242	<0.192		0.192	0.0757	mg/Kg	☼	11/29/13 08:08	12/05/13 04:30	5
PCB-1248	<0.192		0.192	0.0990	mg/Kg	☼	11/29/13 08:08	12/05/13 04:30	5
PCB-1254	<0.192		0.192	0.0990	mg/Kg	☼	11/29/13 08:08	12/05/13 04:30	5
PCB-1260	0.480		0.192	0.0990	mg/Kg	☼	11/29/13 08:08	12/05/13 04:30	5
PCB-1262	<0.192		0.192	0.157	mg/Kg	☼	11/29/13 08:08	12/05/13 04:30	5
PCB-1268	<0.192		0.192	0.0815	mg/Kg	☼	11/29/13 08:08	12/05/13 04:30	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		30 - 150				11/29/13 08:08	12/05/13 04:30	5
Tetrachloro-m-xylene	80		30 - 150				11/29/13 08:08	12/05/13 04:30	5
DCB Decachlorobiphenyl	83		30 - 150				11/29/13 08:08	12/05/13 04:30	5
DCB Decachlorobiphenyl	456	X	30 - 150				11/29/13 08:08	12/05/13 04:30	5

Client Sample ID: WCSB-12 (2.5-3)

Lab Sample ID: 480-50847-22

Date Collected: 11/22/13 16:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 87.6

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00258		0.00258	0.000516	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,1,1-Trichloroethane	<0.00258		0.00258	0.000375	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,1,2,2-Tetrachloroethane	<0.00258		0.00258	0.000837	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,1,2-Trichloroethane	<0.00258		0.00258	0.000671	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,1-Dichloroethane	<0.00258		0.00258	0.000630	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,1-Dichloroethene	<0.00258		0.00258	0.000632	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,1-Dichloropropene	<0.00258		0.00258	0.000733	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,2,3-Trichlorobenzene	<0.00258		0.00258	0.000548	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,2,3-Trichloropropane	<0.00258		0.00258	0.000525	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,2,4-Trichlorobenzene	<0.00258		0.00258	0.000314	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,2,4-Trimethylbenzene	<0.00258		0.00258	0.000991	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,2-Dibromo-3-Chloropropane	<0.0258		0.0258	0.00258	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,2-Dichlorobenzene	<0.00258		0.00258	0.000404	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,2-Dichloroethane	<0.00258		0.00258	0.000259	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,2-Dichloropropane	<0.00258		0.00258	0.00258	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,3,5-Trimethylbenzene	<0.00258		0.00258	0.000332	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,3-Dichlorobenzene	<0.00258		0.00258	0.000265	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,3-Dichloropropane	<0.00258		0.00258	0.000310	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,4-Dichlorobenzene	<0.00258		0.00258	0.000723	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
1,4-Dioxane	<0.258		0.258	0.0249	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
2,2-Dichloropropane	<0.00258		0.00258	0.000877	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
2-Butanone (MEK)	<0.0258	*	0.0258	0.00189	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
2-Chlorotoluene	<0.00258		0.00258	0.000339	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
2-Hexanone	<0.0258		0.0258	0.00258	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
4-Chlorotoluene	<0.00258		0.00258	0.000609	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
4-Isopropyltoluene	<0.00258		0.00258	0.000414	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
4-Methyl-2-pentanone (MIBK)	<0.0258		0.0258	0.00169	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Acetone	0.0341	J	0.258	0.00435	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-12 (2.5-3)

Lab Sample ID: 480-50847-22

Date Collected: 11/22/13 16:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 87.6

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00258		0.00258	0.000253	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Bromobenzene	<0.00258		0.00258	0.000908	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Bromoform	<0.00258		0.00258	0.00258	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Bromomethane	<0.00516		0.00516	0.000465	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Carbon disulfide	<0.00258		0.00258	0.00258	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Carbon tetrachloride	<0.00258		0.00258	0.000500	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Chlorobenzene	<0.00258		0.00258	0.000681	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Chlorobromomethane	<0.00258		0.00258	0.000373	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Chlorodibromomethane	<0.00258		0.00258	0.000661	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Chloroethane	<0.00516		0.00516	0.00117	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Chloroform	<0.00258		0.00258	0.000319	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Chloromethane	<0.00516		0.00516	0.000312	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
cis-1,2-Dichloroethene	<0.00258		0.00258	0.000661	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
cis-1,3-Dichloropropene	<0.00258		0.00258	0.000743	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Dichlorobromomethane	<0.00258		0.00258	0.000692	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Dichlorodifluoromethane	<0.00516		0.00516	0.000426	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Ethyl ether	<0.00258		0.00258	0.00217	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Ethylbenzene	0.00606		0.00258	0.000356	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Ethylene Dibromide	<0.00258		0.00258	0.000663	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Hexachlorobutadiene	<0.00258		0.00258	0.000605	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Isopropyl ether	<0.00258		0.00258	0.00258	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Isopropylbenzene	<0.00258		0.00258	0.000778	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Methyl tert-butyl ether	<0.00258		0.00258	0.000507	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Methylene Chloride	<0.00258		0.00258	0.00237	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
m-Xylene & p-Xylene	0.0203		0.00516	0.000867	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Naphthalene	<0.0258		0.0258	0.000692	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
n-Butylbenzene	<0.00258		0.00258	0.000449	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
N-Propylbenzene	<0.00258		0.00258	0.000413	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
o-Xylene	0.00738		0.00258	0.000674	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
sec-Butylbenzene	<0.00258		0.00258	0.000449	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Styrene	<0.00258		0.00258	0.000258	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Tert-amyl methyl ether	<0.00258		0.00258	0.00132	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Tert-butyl ethyl ether	<0.00258		0.00258	0.00227	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
tert-Butylbenzene	<0.00258		0.00258	0.000537	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Tetrachloroethene	0.132		0.00258	0.000693	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Tetrahydrofuran	<0.0516		0.0516	0.00475	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Toluene	0.0866		0.00258	0.000390	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
trans-1,2-Dichloroethene	<0.00258		0.00258	0.000533	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
trans-1,3-Dichloropropene	<0.00258		0.00258	0.00227	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Trichloroethene	0.00476		0.00258	0.00114	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Trichlorofluoromethane	<0.00516		0.00516	0.000488	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Vinyl chloride	<0.00258		0.00258	0.000630	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Dibromomethane	<0.00258		0.00258	0.000532	mg/Kg	☼	11/26/13 10:30	11/26/13 18:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	91		70 - 130				11/26/13 10:30	11/26/13 18:29	1
1,2-Dichloroethane-d4 (Surr)	108		70 - 130				11/26/13 10:30	11/26/13 18:29	1
4-Bromofluorobenzene (Surr)	91		70 - 130				11/26/13 10:30	11/26/13 18:29	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-12 (2.5-3)

Lab Sample ID: 480-50847-22

Date Collected: 11/22/13 16:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 87.6

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<375		375	239	mg/Kg	☼	11/29/13 08:08	12/05/13 04:45	10000
PCB-1221	<375		375	182	mg/Kg	☼	11/29/13 08:08	12/05/13 04:45	10000
PCB-1232	<375		375	159	mg/Kg	☼	11/29/13 08:08	12/05/13 04:45	10000
PCB-1242	1220		375	148	mg/Kg	☼	11/29/13 08:08	12/05/13 04:45	10000
PCB-1248	<375		375	193	mg/Kg	☼	11/29/13 08:08	12/05/13 04:45	10000
PCB-1254	<375		375	193	mg/Kg	☼	11/29/13 08:08	12/05/13 04:45	10000
PCB-1260	<375		375	193	mg/Kg	☼	11/29/13 08:08	12/05/13 04:45	10000
PCB-1262	<375		375	307	mg/Kg	☼	11/29/13 08:08	12/05/13 04:45	10000
PCB-1268	<375		375	159	mg/Kg	☼	11/29/13 08:08	12/05/13 04:45	10000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 08:08	12/05/13 04:45	10000
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 08:08	12/05/13 04:45	10000
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 08:08	12/05/13 04:45	10000
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 08:08	12/05/13 04:45	10000

Client Sample ID: WCSB-912 (2.5-3)

Lab Sample ID: 480-50847-24

Date Collected: 11/22/13 16:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 86.7

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<378		378	241	mg/Kg	☼	11/29/13 08:08	12/05/13 05:00	10000
PCB-1221	<378		378	183	mg/Kg	☼	11/29/13 08:08	12/05/13 05:00	10000
PCB-1232	<378		378	161	mg/Kg	☼	11/29/13 08:08	12/05/13 05:00	10000
PCB-1242	2300		378	149	mg/Kg	☼	11/29/13 08:08	12/05/13 05:00	10000
PCB-1248	<378		378	195	mg/Kg	☼	11/29/13 08:08	12/05/13 05:00	10000
PCB-1254	<378		378	195	mg/Kg	☼	11/29/13 08:08	12/05/13 05:00	10000
PCB-1260	<378		378	195	mg/Kg	☼	11/29/13 08:08	12/05/13 05:00	10000
PCB-1262	<378		378	310	mg/Kg	☼	11/29/13 08:08	12/05/13 05:00	10000
PCB-1268	<378		378	161	mg/Kg	☼	11/29/13 08:08	12/05/13 05:00	10000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 08:08	12/05/13 05:00	10000
Tetrachloro-m-xylene	0	X	30 - 150	11/29/13 08:08	12/05/13 05:00	10000
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 08:08	12/05/13 05:00	10000
DCB Decachlorobiphenyl	0	X	30 - 150	11/29/13 08:08	12/05/13 05:00	10000

Client Sample ID: WCSB-11 (6-7)

Lab Sample ID: 480-50847-25

Date Collected: 11/22/13 16:25

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 96.5

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<2.72		2.72	1.09	mg/Kg	☼	11/27/13 15:15	12/04/13 14:36	5
Arsenic	4.67		1.09	0.435	mg/Kg	☼	11/27/13 15:15	11/30/13 20:00	1
Barium	24.1		0.544	0.120	mg/Kg	☼	11/27/13 15:15	11/30/13 20:00	1
Beryllium	0.368		0.218	0.0305	mg/Kg	☼	11/27/13 15:15	11/30/13 20:00	1
Cadmium	0.249		0.218	0.0326	mg/Kg	☼	11/27/13 15:15	11/30/13 20:00	1
Chromium	7.16		0.544	0.218	mg/Kg	☼	11/27/13 15:15	11/30/13 20:00	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-11 (6-7)

Lab Sample ID: 480-50847-25

Date Collected: 11/22/13 16:25

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 96.5

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	8.01		1.09	0.250	mg/Kg	☼	11/27/13 15:15	11/30/13 20:00	1
Thallium	<1.09		1.09	0.326	mg/Kg	☼	11/27/13 15:15	11/30/13 20:00	1
Vanadium	5.68		0.544	0.120	mg/Kg	☼	11/27/13 15:15	11/30/13 20:00	1
Zinc	88.3	B	2.72	0.166	mg/Kg	☼	11/27/13 15:15	11/30/13 20:00	1
Lead	18.2		0.544	0.261	mg/Kg	☼	11/27/13 15:15	11/30/13 20:00	1
Selenium	<0.544		0.544	0.435	mg/Kg	☼	11/27/13 15:15	11/30/13 20:00	1
Antimony	<0.544		0.544	0.435	mg/Kg	☼	11/27/13 15:15	11/30/13 20:00	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0158	J	0.0976	0.00791	mg/Kg	☼	11/29/13 08:40	11/29/13 16:08	1

Client Sample ID: WCSB-7 (7-8)

Lab Sample ID: 480-50847-26

Date Collected: 11/22/13 16:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 88.8

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0374		0.0374	0.0238	mg/Kg	☼	11/29/13 08:08	12/05/13 05:15	1
PCB-1221	<0.0374		0.0374	0.0181	mg/Kg	☼	11/29/13 08:08	12/05/13 05:15	1
PCB-1232	<0.0374		0.0374	0.0159	mg/Kg	☼	11/29/13 08:08	12/05/13 05:15	1
PCB-1242	0.0258	J	0.0374	0.0147	mg/Kg	☼	11/29/13 08:08	12/05/13 05:15	1
PCB-1248	<0.0374		0.0374	0.0193	mg/Kg	☼	11/29/13 08:08	12/05/13 05:15	1
PCB-1254	<0.0374		0.0374	0.0193	mg/Kg	☼	11/29/13 08:08	12/05/13 05:15	1
PCB-1260	<0.0374		0.0374	0.0193	mg/Kg	☼	11/29/13 08:08	12/05/13 05:15	1
PCB-1262	<0.0374		0.0374	0.0306	mg/Kg	☼	11/29/13 08:08	12/05/13 05:15	1
PCB-1268	<0.0374		0.0374	0.0159	mg/Kg	☼	11/29/13 08:08	12/05/13 05:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		30 - 150	11/29/13 08:08	12/05/13 05:15	1
Tetrachloro-m-xylene	80		30 - 150	11/29/13 08:08	12/05/13 05:15	1
DCB Decachlorobiphenyl	71		30 - 150	11/29/13 08:08	12/05/13 05:15	1
DCB Decachlorobiphenyl	71		30 - 150	11/29/13 08:08	12/05/13 05:15	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.561		0.561	0.225	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1
Arsenic	1.79		1.12	0.449	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1
Barium	14.1		0.561	0.123	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1
Beryllium	0.263		0.225	0.0314	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1
Cadmium	<0.225		0.225	0.0337	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1
Chromium	6.36		0.561	0.225	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1
Nickel	7.15		1.12	0.258	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1
Thallium	<1.12		1.12	0.337	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1
Vanadium	13.8		0.561	0.123	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1
Zinc	43.0	B	2.81	0.172	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1
Lead	7.65		0.561	0.269	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1
Selenium	<0.561		0.561	0.449	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1
Antimony	<0.561		0.561	0.449	mg/Kg	☼	11/27/13 15:15	11/30/13 20:16	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-7 (7-8)

Lab Sample ID: 480-50847-26

Date Collected: 11/22/13 16:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 88.8

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0133	J	0.108	0.00874	mg/Kg	☼	11/29/13 08:40	11/29/13 16:15	1

Client Sample ID: TB-11222013 (2)

Lab Sample ID: 480-50847-27

Date Collected: 11/22/13 12:00

Matrix: Solid

Date Received: 11/26/13 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.125		0.125	0.0250	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,1,1-Trichloroethane	<0.125		0.125	0.0182	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,1,2,2-Tetrachloroethane	<0.125		0.125	0.0406	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,1,2-Trichloroethane	<0.125		0.125	0.0325	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,1-Dichloroethane	<0.125		0.125	0.0305	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,1-Dichloroethene	<0.125		0.125	0.0306	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,1-Dichloropropene	<0.125		0.125	0.0355	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,2,3-Trichlorobenzene	<0.125		0.125	0.0266	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,2,3-Trichloropropane	<0.125		0.125	0.0255	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,2,4-Trichlorobenzene	<0.125		0.125	0.0152	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,2,4-Trimethylbenzene	<0.125		0.125	0.0480	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,2-Dibromo-3-Chloropropane	<1.25		1.25	0.125	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,2-Dichlorobenzene	<0.125		0.125	0.0196	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,2-Dichloroethane	<0.125		0.125	0.0126	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,2-Dichloropropane	<0.125		0.125	0.125	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,3,5-Trimethylbenzene	<0.125		0.125	0.0161	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,3-Dichlorobenzene	<0.125		0.125	0.0129	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,3-Dichloropropane	<0.125		0.125	0.0150	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,4-Dichlorobenzene	<0.125		0.125	0.0350	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
1,4-Dioxane	<12.5		12.5	1.21	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
2,2-Dichloropropane	<0.125		0.125	0.0425	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
2-Butanone (MEK)	<1.25	*	1.25	0.0915	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
2-Chlorotoluene	<0.125		0.125	0.0164	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
2-Hexanone	<1.25		1.25	0.125	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
4-Chlorotoluene	<0.125		0.125	0.0295	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
4-Isopropyltoluene	<0.125		0.125	0.0201	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
4-Methyl-2-pentanone (MIBK)	<1.25		1.25	0.0820	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Acetone	<12.5		12.5	0.211	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Benzene	<0.125		0.125	0.0123	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Bromobenzene	<0.125		0.125	0.0440	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Bromoform	<0.125		0.125	0.125	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Bromomethane	<0.250		0.250	0.0225	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Carbon disulfide	<0.125		0.125	0.125	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Carbon tetrachloride	<0.125		0.125	0.0242	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Chlorobenzene	<0.125		0.125	0.0330	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Chlorobromomethane	<0.125		0.125	0.0181	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Chlorodibromomethane	<0.125		0.125	0.0320	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Chloroethane	<0.250		0.250	0.0565	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Chloroform	<0.125		0.125	0.0155	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Chloromethane	<0.250		0.250	0.0151	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
cis-1,2-Dichloroethene	<0.125		0.125	0.0320	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
cis-1,3-Dichloropropene	<0.125		0.125	0.0360	mg/Kg		11/26/13 10:30	11/26/13 18:55	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: TB-11222013 (2)

Lab Sample ID: 480-50847-27

Date Collected: 11/22/13 12:00

Matrix: Solid

Date Received: 11/26/13 02:00

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	<0.125		0.125	0.0335	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Dichlorodifluoromethane	<0.250		0.250	0.0207	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Ethyl ether	<0.125		0.125	0.105	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Ethylbenzene	<0.125		0.125	0.0173	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Ethylene Dibromide	<0.125		0.125	0.0321	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Hexachlorobutadiene	<0.125		0.125	0.0293	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Isopropyl ether	<0.125		0.125	0.125	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Isopropylbenzene	<0.125		0.125	0.0377	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Methyl tert-butyl ether	<0.125		0.125	0.0246	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Methylene Chloride	<0.125		0.125	0.115	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
m-Xylene & p-Xylene	<0.250		0.250	0.0420	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Naphthalene	<1.25		1.25	0.0335	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
n-Butylbenzene	<0.125		0.125	0.0218	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
N-Propylbenzene	<0.125		0.125	0.0200	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
o-Xylene	<0.125		0.125	0.0327	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
sec-Butylbenzene	<0.125		0.125	0.0218	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Styrene	<0.125		0.125	0.0125	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Tert-amyl methyl ether	<0.125		0.125	0.0640	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Tert-butyl ethyl ether	<0.125		0.125	0.110	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
tert-Butylbenzene	<0.125		0.125	0.0260	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Tetrachloroethene	<0.125		0.125	0.0336	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Tetrahydrofuran	<2.50		2.50	0.230	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Toluene	<0.125		0.125	0.0189	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
trans-1,2-Dichloroethene	<0.125		0.125	0.0258	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
trans-1,3-Dichloropropene	<0.125		0.125	0.110	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Trichloroethene	<0.125		0.125	0.0550	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Trichlorofluoromethane	<0.250		0.250	0.0237	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Vinyl chloride	<0.125		0.125	0.0305	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Dibromomethane	<0.125		0.125	0.0258	mg/Kg		11/26/13 10:30	11/26/13 18:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130				11/26/13 10:30	11/26/13 18:55	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130				11/26/13 10:30	11/26/13 18:55	1
4-Bromofluorobenzene (Surr)	97		70 - 130				11/26/13 10:30	11/26/13 18:55	1

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (70-130)	12DCE (70-130)	BFB (70-130)
480-50847-3	WCSB-4 (1-2)	123	107	127
480-50847-3 - DL	WCSB-4 (1-2)	61 X	101	55 X
480-50847-15	WCSB-16 (6-7)	95	103	98
480-50847-16	WCSB-15 (0.5-1.5)	96	105	94
480-50847-19	WCSB-14 (7-8)	96	102	98
480-50847-22	WCSB-12 (2.5-3)	91	108	91
480-50847-27	TB-11222013 (2)	96	98	97
LCS 480-154424/4	Lab Control Sample	97	101	99
LCS 480-154701/1-A	Lab Control Sample	100	107	98
LCSD 480-154424/5	Lab Control Sample Dup	96	98	99
LCSD 480-154701/2-A	Lab Control Sample Dup	99	102	96
MB 480-154424/6	Method Blank	96	97	95
MB 480-154701/3-A	Method Blank	98	100	94

Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (30-150)	TCX2 (30-150)	DCB1 (30-150)	DCB2 (30-150)
480-50847-1	WCSB-20 (14-15)	23293 X	5384 X	17635 X	12695 X
480-50847-5	WCSB-22 (2.5-3)	0 X	0 X	0 X	0 X
480-50847-7	WCSB-21 (2.5-3)	83	85	88	66
480-50847-9	WCSB-19 (2.5-3)	76	90	77	58
480-50847-11	WCSB-18 (2.5-3)	0 X	0 X	0 X	0 X
480-50847-11 MS	WCSB-18 (2.5-3)	0 X	0 X	0 X	0 X
480-50847-11 MSD	WCSB-18 (2.5-3)	0 X	0 X	0 X	0 X
480-50847-13	WCSB-17 (2.5-3)	0 X	0 X	0 X	0 X
480-50847-17	WCSB-15 (2.5-3)	0 X	0 X	460 X	118
480-50847-20	WCSB-13 (2.5-3)	73	80	83	456 X
480-50847-22	WCSB-12 (2.5-3)	0 X	0 X	0 X	0 X
480-50847-24	WCSB-912 (2.5-3)	0 X	0 X	0 X	0 X
480-50847-26	WCSB-7 (7-8)	71	80	71	71
LCS 240-111692/24-A	Lab Control Sample	82	109	88	78
LCS 240-111693/24-A	Lab Control Sample	70	146	86	91
LCSD 240-111692/25-A	Lab Control Sample Dup	89	114	75	67
LCSD 240-111693/25-A	Lab Control Sample Dup	83	108	60	91
MB 240-111692/23-A	Method Blank	76	85	80	82
MB 240-111693/23-A	Method Blank	73	86	60	74

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		1COD2 (40-140)	2BN1 (40-140)	FBP1 (40-140)	OTPH1 (40-140)
480-50847-1	WCSB-20 (14-15)	35 X	102	100	37 X
480-50847-5	WCSB-22 (2.5-3)	73	72	89	66
480-50847-7	WCSB-21 (2.5-3)	83	75	91	72
480-50847-9	WCSB-19 (2.5-3)	85	76	94	71
480-50847-13	WCSB-17 (2.5-3)	34 X	90	107	29 X
480-50847-19	WCSB-14 (7-8)	78	71	91	76
LCS 480-154450/2-B	Lab Control Sample	74	66	83	68
LCS 480-155085/2-B	Lab Control Sample	72	62	83	63
LCSD 480-154450/3-B	Lab Control Sample Dup	72	74	89	66
LCSD 480-155085/3-B	Lab Control Sample Dup	79	69	91	67
MB 480-154450/1-B	Method Blank	80	82	96	75
MB 480-155085/1-B	Method Blank	74	66	89	69

Surrogate Legend

1COD = 1-Chlorooctadecane
2BN = 2-Bromonaphthalene
FBP = 2-Fluorobiphenyl
OTPH = o-Terphenyl

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-154424/6

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00250		0.00250	0.000500	mg/Kg			11/26/13 12:23	1
1,1,1-Trichloroethane	<0.00250		0.00250	0.000363	mg/Kg			11/26/13 12:23	1
1,1,2,2-Tetrachloroethane	<0.00250		0.00250	0.000811	mg/Kg			11/26/13 12:23	1
1,1,2-Trichloroethane	<0.00250		0.00250	0.000650	mg/Kg			11/26/13 12:23	1
1,1-Dichloroethane	<0.00250		0.00250	0.000610	mg/Kg			11/26/13 12:23	1
1,1-Dichloroethene	<0.00250		0.00250	0.000612	mg/Kg			11/26/13 12:23	1
1,1-Dichloropropene	<0.00250		0.00250	0.000710	mg/Kg			11/26/13 12:23	1
1,2,3-Trichlorobenzene	<0.00250		0.00250	0.000531	mg/Kg			11/26/13 12:23	1
1,2,3-Trichloropropane	<0.00250		0.00250	0.000509	mg/Kg			11/26/13 12:23	1
1,2,4-Trichlorobenzene	<0.00250		0.00250	0.000304	mg/Kg			11/26/13 12:23	1
1,2,4-Trimethylbenzene	<0.00250		0.00250	0.000960	mg/Kg			11/26/13 12:23	1
1,2-Dibromo-3-Chloropropane	<0.0250		0.0250	0.00250	mg/Kg			11/26/13 12:23	1
1,2-Dichlorobenzene	<0.00250		0.00250	0.000391	mg/Kg			11/26/13 12:23	1
1,2-Dichloroethane	<0.00250		0.00250	0.000251	mg/Kg			11/26/13 12:23	1
1,2-Dichloropropane	<0.00250		0.00250	0.00250	mg/Kg			11/26/13 12:23	1
1,3,5-Trimethylbenzene	<0.00250		0.00250	0.000322	mg/Kg			11/26/13 12:23	1
1,3-Dichlorobenzene	<0.00250		0.00250	0.000257	mg/Kg			11/26/13 12:23	1
1,3-Dichloropropane	<0.00250		0.00250	0.000300	mg/Kg			11/26/13 12:23	1
1,4-Dichlorobenzene	<0.00250		0.00250	0.000700	mg/Kg			11/26/13 12:23	1
1,4-Dioxane	<0.250		0.250	0.0241	mg/Kg			11/26/13 12:23	1
2,2-Dichloropropane	<0.00250		0.00250	0.000850	mg/Kg			11/26/13 12:23	1
2-Butanone (MEK)	<0.0250		0.0250	0.00183	mg/Kg			11/26/13 12:23	1
2-Chlorotoluene	<0.00250		0.00250	0.000328	mg/Kg			11/26/13 12:23	1
2-Hexanone	<0.0250		0.0250	0.00250	mg/Kg			11/26/13 12:23	1
4-Chlorotoluene	<0.00250		0.00250	0.000590	mg/Kg			11/26/13 12:23	1
4-Isopropyltoluene	<0.00250		0.00250	0.000401	mg/Kg			11/26/13 12:23	1
4-Methyl-2-pentanone (MIBK)	<0.0250		0.0250	0.00164	mg/Kg			11/26/13 12:23	1
Acetone	<0.250		0.250	0.00421	mg/Kg			11/26/13 12:23	1
Benzene	<0.00250		0.00250	0.000245	mg/Kg			11/26/13 12:23	1
Bromobenzene	<0.00250		0.00250	0.000880	mg/Kg			11/26/13 12:23	1
Bromoform	<0.00250		0.00250	0.00250	mg/Kg			11/26/13 12:23	1
Bromomethane	<0.00500		0.00500	0.000450	mg/Kg			11/26/13 12:23	1
Carbon disulfide	<0.00250		0.00250	0.00250	mg/Kg			11/26/13 12:23	1
Carbon tetrachloride	<0.00250		0.00250	0.000484	mg/Kg			11/26/13 12:23	1
Chlorobenzene	<0.00250		0.00250	0.000660	mg/Kg			11/26/13 12:23	1
Chlorobromomethane	<0.00250		0.00250	0.000361	mg/Kg			11/26/13 12:23	1
Chlorodibromomethane	<0.00250		0.00250	0.000640	mg/Kg			11/26/13 12:23	1
Chloroethane	<0.00500		0.00500	0.00113	mg/Kg			11/26/13 12:23	1
Chloroform	<0.00250		0.00250	0.000309	mg/Kg			11/26/13 12:23	1
Chloromethane	<0.00500		0.00500	0.000302	mg/Kg			11/26/13 12:23	1
cis-1,2-Dichloroethene	<0.00250		0.00250	0.000640	mg/Kg			11/26/13 12:23	1
cis-1,3-Dichloropropene	<0.00250		0.00250	0.000720	mg/Kg			11/26/13 12:23	1
Dichlorobromomethane	<0.00250		0.00250	0.000670	mg/Kg			11/26/13 12:23	1
Dichlorodifluoromethane	<0.00500		0.00500	0.000413	mg/Kg			11/26/13 12:23	1
Ethyl ether	<0.00250		0.00250	0.00210	mg/Kg			11/26/13 12:23	1
Ethylbenzene	<0.00250		0.00250	0.000345	mg/Kg			11/26/13 12:23	1
Ethylene Dibromide	<0.00250		0.00250	0.000642	mg/Kg			11/26/13 12:23	1
Hexachlorobutadiene	<0.00250		0.00250	0.000586	mg/Kg			11/26/13 12:23	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-154424/6

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.00250		0.00250	0.00250	mg/Kg			11/26/13 12:23	1
Isopropylbenzene	<0.00250		0.00250	0.000754	mg/Kg			11/26/13 12:23	1
Methyl tert-butyl ether	<0.00250		0.00250	0.000491	mg/Kg			11/26/13 12:23	1
Methylene Chloride	<0.00250		0.00250	0.00230	mg/Kg			11/26/13 12:23	1
m-Xylene & p-Xylene	<0.00500		0.00500	0.000840	mg/Kg			11/26/13 12:23	1
Naphthalene	<0.0250		0.0250	0.000670	mg/Kg			11/26/13 12:23	1
n-Butylbenzene	<0.00250		0.00250	0.000435	mg/Kg			11/26/13 12:23	1
N-Propylbenzene	<0.00250		0.00250	0.000400	mg/Kg			11/26/13 12:23	1
o-Xylene	<0.00250		0.00250	0.000653	mg/Kg			11/26/13 12:23	1
sec-Butylbenzene	<0.00250		0.00250	0.000435	mg/Kg			11/26/13 12:23	1
Styrene	<0.00250		0.00250	0.000250	mg/Kg			11/26/13 12:23	1
Tert-amyl methyl ether	<0.00250		0.00250	0.00128	mg/Kg			11/26/13 12:23	1
Tert-butyl ethyl ether	<0.00250		0.00250	0.00220	mg/Kg			11/26/13 12:23	1
tert-Butylbenzene	<0.00250		0.00250	0.000520	mg/Kg			11/26/13 12:23	1
Tetrachloroethene	<0.00250		0.00250	0.000671	mg/Kg			11/26/13 12:23	1
Tetrahydrofuran	<0.0500		0.0500	0.00460	mg/Kg			11/26/13 12:23	1
Toluene	<0.00250		0.00250	0.000378	mg/Kg			11/26/13 12:23	1
trans-1,2-Dichloroethene	<0.00250		0.00250	0.000516	mg/Kg			11/26/13 12:23	1
trans-1,3-Dichloropropene	<0.00250		0.00250	0.00220	mg/Kg			11/26/13 12:23	1
Trichloroethene	<0.00250		0.00250	0.00110	mg/Kg			11/26/13 12:23	1
Trichlorofluoromethane	<0.00500		0.00500	0.000473	mg/Kg			11/26/13 12:23	1
Vinyl chloride	<0.00250		0.00250	0.000610	mg/Kg			11/26/13 12:23	1
Dibromomethane	<0.00250		0.00250	0.000515	mg/Kg			11/26/13 12:23	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130		11/26/13 12:23	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130		11/26/13 12:23	1
4-Bromofluorobenzene (Surr)	95		70 - 130		11/26/13 12:23	1

Lab Sample ID: LCS 480-154424/4

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0500	0.04851		mg/Kg		97	70 - 130
1,1,1-Trichloroethane	0.0500	0.04533		mg/Kg		91	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.05319		mg/Kg		106	70 - 130
1,1,2-Trichloroethane	0.0500	0.05063		mg/Kg		101	70 - 130
1,1-Dichloroethane	0.0500	0.04964		mg/Kg		99	70 - 130
1,1-Dichloroethene	0.0500	0.04300		mg/Kg		86	70 - 130
1,1-Dichloropropene	0.0500	0.04672		mg/Kg		93	70 - 130
1,2,3-Trichlorobenzene	0.0500	0.04910		mg/Kg		98	70 - 130
1,2,3-Trichloropropane	0.0500	0.05322		mg/Kg		106	70 - 130
1,2,4-Trichlorobenzene	0.0500	0.04887		mg/Kg		98	70 - 130
1,2,4-Trimethylbenzene	0.0500	0.04478		mg/Kg		90	70 - 130
1,2-Dibromo-3-Chloropropane	0.0500	0.04950		mg/Kg		99	70 - 130
1,2-Dichlorobenzene	0.0500	0.04828		mg/Kg		97	70 - 130
1,2-Dichloroethane	0.0500	0.05049		mg/Kg		101	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-154424/4

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.0500	0.05015		mg/Kg		100	70 - 130
1,3,5-Trimethylbenzene	0.0500	0.04715		mg/Kg		94	70 - 130
1,3-Dichlorobenzene	0.0500	0.04811		mg/Kg		96	70 - 130
1,3-Dichloropropane	0.0500	0.05066		mg/Kg		101	70 - 130
1,4-Dichlorobenzene	0.0500	0.04748		mg/Kg		95	70 - 130
1,4-Dioxane	2.00	2.132		mg/Kg		107	70 - 130
2,2-Dichloropropane	0.0500	0.04338		mg/Kg		87	70 - 130
2-Butanone (MEK)	0.250	0.3491	*	mg/Kg		140	70 - 130
2-Chlorotoluene	0.0500	0.04868		mg/Kg		97	70 - 130
2-Hexanone	0.250	0.2541		mg/Kg		102	70 - 130
4-Chlorotoluene	0.0500	0.05181		mg/Kg		104	70 - 130
4-Isopropyltoluene	0.0500	0.04715		mg/Kg		94	70 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2530		mg/Kg		101	70 - 130
Acetone	0.250	0.3183		mg/Kg		127	70 - 130
Benzene	0.0500	0.04700		mg/Kg		94	70 - 130
Bromobenzene	0.0500	0.04857		mg/Kg		97	70 - 130
Bromoform	0.0500	0.04492		mg/Kg		90	70 - 130
Bromomethane	0.0500	0.05282		mg/Kg		106	70 - 130
Carbon disulfide	0.0500	0.04742		mg/Kg		95	70 - 130
Carbon tetrachloride	0.0500	0.04396		mg/Kg		88	70 - 130
Chlorobenzene	0.0500	0.04769		mg/Kg		95	70 - 130
Chlorobromomethane	0.0500	0.04956		mg/Kg		99	70 - 130
Chlorodibromomethane	0.0500	0.05177		mg/Kg		104	70 - 130
Chloroethane	0.0500	0.05357		mg/Kg		107	70 - 130
Chloroform	0.0500	0.04852		mg/Kg		97	70 - 130
Chloromethane	0.0500	0.04453		mg/Kg		89	70 - 130
cis-1,2-Dichloroethene	0.0500	0.04864		mg/Kg		97	70 - 130
cis-1,3-Dichloropropene	0.0500	0.05167		mg/Kg		103	70 - 130
Dichlorobromomethane	0.0500	0.05078		mg/Kg		102	70 - 130
Dichlorodifluoromethane	0.100	0.07825		mg/Kg		78	70 - 130
Ethyl ether	0.0500	0.04833		mg/Kg		97	70 - 130
Ethylbenzene	0.0500	0.04467		mg/Kg		89	70 - 130
Ethylene Dibromide	0.0500	0.05053		mg/Kg		101	70 - 130
Hexachlorobutadiene	0.0500	0.04666		mg/Kg		93	70 - 130
Isopropyl ether	0.0500	0.05011		mg/Kg		100	70 - 130
Isopropylbenzene	0.0500	0.04760		mg/Kg		95	70 - 130
Methyl tert-butyl ether	0.0500	0.04572		mg/Kg		91	70 - 130
Methylene Chloride	0.0500	0.04628		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.100	0.08631		mg/Kg		86	70 - 130
Naphthalene	0.0500	0.04613		mg/Kg		92	70 - 130
n-Butylbenzene	0.0500	0.04728		mg/Kg		95	70 - 130
N-Propylbenzene	0.0500	0.04776		mg/Kg		96	70 - 130
o-Xylene	0.0500	0.04500		mg/Kg		90	70 - 130
sec-Butylbenzene	0.0500	0.04716		mg/Kg		94	70 - 130
Styrene	0.0500	0.04809		mg/Kg		96	70 - 130
Tert-amyl methyl ether	0.0500	0.04947		mg/Kg		99	70 - 130
Tert-butyl ethyl ether	0.0500	0.04840		mg/Kg		97	70 - 130
tert-Butylbenzene	0.0500	0.04632		mg/Kg		93	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-154424/4

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	0.0500	0.04785		mg/Kg		96	70 - 130
Tetrahydrofuran	0.250	0.2532		mg/Kg		101	70 - 130
Toluene	0.0500	0.04169		mg/Kg		83	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04601		mg/Kg		92	70 - 130
trans-1,3-Dichloropropene	0.0500	0.04985		mg/Kg		100	70 - 130
Trichloroethene	0.0500	0.04717		mg/Kg		94	70 - 130
Trichlorofluoromethane	0.0500	0.05005		mg/Kg		100	70 - 130
Vinyl chloride	0.0500	0.04613		mg/Kg		92	70 - 130
Dibromomethane	0.0500	0.05134		mg/Kg		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	97		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 480-154424/5

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0500	0.04910		mg/Kg		98	70 - 130	1	20
1,1,1-Trichloroethane	0.0500	0.04672		mg/Kg		93	70 - 130	3	20
1,1,2,2-Tetrachloroethane	0.0500	0.05031		mg/Kg		101	70 - 130	6	20
1,1,2-Trichloroethane	0.0500	0.04980		mg/Kg		100	70 - 130	2	20
1,1-Dichloroethane	0.0500	0.04976		mg/Kg		100	70 - 130	0	20
1,1-Dichloroethene	0.0500	0.04422		mg/Kg		88	70 - 130	3	20
1,1-Dichloropropene	0.0500	0.04716		mg/Kg		94	70 - 130	1	20
1,2,3-Trichlorobenzene	0.0500	0.05078		mg/Kg		102	70 - 130	3	20
1,2,3-Trichloropropane	0.0500	0.05121		mg/Kg		102	70 - 130	4	20
1,2,4-Trichlorobenzene	0.0500	0.05005		mg/Kg		100	70 - 130	2	20
1,2,4-Trimethylbenzene	0.0500	0.04461		mg/Kg		89	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	0.0500	0.04624		mg/Kg		92	70 - 130	7	20
1,2-Dichlorobenzene	0.0500	0.04889		mg/Kg		98	70 - 130	1	20
1,2-Dichloroethane	0.0500	0.05019		mg/Kg		100	70 - 130	1	20
1,2-Dichloropropane	0.0500	0.05061		mg/Kg		101	70 - 130	1	20
1,3,5-Trimethylbenzene	0.0500	0.04712		mg/Kg		94	70 - 130	0	20
1,3-Dichlorobenzene	0.0500	0.04839		mg/Kg		97	70 - 130	1	20
1,3-Dichloropropane	0.0500	0.04949		mg/Kg		99	70 - 130	2	20
1,4-Dichlorobenzene	0.0500	0.04779		mg/Kg		96	70 - 130	1	20
1,4-Dioxane	2.00	1.948		mg/Kg		97	70 - 130	9	20
2,2-Dichloropropane	0.0500	0.04442		mg/Kg		89	70 - 130	2	20
2-Butanone (MEK)	0.250	0.3239		mg/Kg		130	70 - 130	7	20
2-Chlorotoluene	0.0500	0.04863		mg/Kg		97	70 - 130	0	20
2-Hexanone	0.250	0.2355		mg/Kg		94	70 - 130	8	20
4-Chlorotoluene	0.0500	0.05166		mg/Kg		103	70 - 130	0	20
4-Isopropyltoluene	0.0500	0.04821		mg/Kg		96	70 - 130	2	20
4-Methyl-2-pentanone (MIBK)	0.250	0.2372		mg/Kg		95	70 - 130	6	20
Acetone	0.250	0.2943		mg/Kg		118	70 - 130	8	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-154424/5

Matrix: Solid

Analysis Batch: 154424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04758		mg/Kg		95	70 - 130	1	20
Bromobenzene	0.0500	0.04871		mg/Kg		97	70 - 130	0	20
Bromoform	0.0500	0.04370		mg/Kg		87	70 - 130	3	20
Bromomethane	0.0500	0.05350		mg/Kg		107	70 - 130	1	20
Carbon disulfide	0.0500	0.04820		mg/Kg		96	70 - 130	2	20
Carbon tetrachloride	0.0500	0.04559		mg/Kg		91	70 - 130	4	20
Chlorobenzene	0.0500	0.04765		mg/Kg		95	70 - 130	0	20
Chlorobromomethane	0.0500	0.04930		mg/Kg		99	70 - 130	1	20
Chlorodibromomethane	0.0500	0.05077		mg/Kg		102	70 - 130	2	20
Chloroethane	0.0500	0.05694		mg/Kg		114	70 - 130	6	20
Chloroform	0.0500	0.04878		mg/Kg		98	70 - 130	1	20
Chloromethane	0.0500	0.04581		mg/Kg		92	70 - 130	3	20
cis-1,2-Dichloroethene	0.0500	0.04872		mg/Kg		97	70 - 130	0	20
cis-1,3-Dichloropropene	0.0500	0.05158		mg/Kg		103	70 - 130	0	20
Dichlorobromomethane	0.0500	0.05082		mg/Kg		102	70 - 130	0	20
Dichlorodifluoromethane	0.100	0.07868		mg/Kg		79	70 - 130	1	20
Ethyl ether	0.0500	0.04878		mg/Kg		98	70 - 130	1	20
Ethylbenzene	0.0500	0.04503		mg/Kg		90	70 - 130	1	20
Ethylene Dibromide	0.0500	0.04894		mg/Kg		98	70 - 130	3	20
Hexachlorobutadiene	0.0500	0.04891		mg/Kg		98	70 - 130	5	20
Isopropyl ether	0.0500	0.05004		mg/Kg		100	70 - 130	0	20
Isopropylbenzene	0.0500	0.04787		mg/Kg		96	70 - 130	1	20
Methyl tert-butyl ether	0.0500	0.04521		mg/Kg		90	70 - 130	1	20
Methylene Chloride	0.0500	0.04657		mg/Kg		93	70 - 130	1	20
m-Xylene & p-Xylene	0.100	0.08640		mg/Kg		86	70 - 130	0	20
Naphthalene	0.0500	0.04727		mg/Kg		95	70 - 130	2	20
n-Butylbenzene	0.0500	0.04843		mg/Kg		97	70 - 130	2	20
N-Propylbenzene	0.0500	0.04773		mg/Kg		95	70 - 130	0	20
o-Xylene	0.0500	0.04518		mg/Kg		90	70 - 130	0	20
sec-Butylbenzene	0.0500	0.04803		mg/Kg		96	70 - 130	2	20
Styrene	0.0500	0.04827		mg/Kg		97	70 - 130	0	20
Tert-amyl methyl ether	0.0500	0.04940		mg/Kg		99	70 - 130	0	20
Tert-butyl ethyl ether	0.0500	0.04886		mg/Kg		98	70 - 130	1	20
tert-Butylbenzene	0.0500	0.04751		mg/Kg		95	70 - 130	3	20
Tetrachloroethene	0.0500	0.04882		mg/Kg		98	70 - 130	2	20
Tetrahydrofuran	0.250	0.2371		mg/Kg		95	70 - 130	7	20
Toluene	0.0500	0.04167		mg/Kg		83	70 - 130	0	20
trans-1,2-Dichloroethene	0.0500	0.04679		mg/Kg		94	70 - 130	2	20
trans-1,3-Dichloropropene	0.0500	0.04882		mg/Kg		98	70 - 130	2	20
Trichloroethene	0.0500	0.04768		mg/Kg		95	70 - 130	1	20
Trichlorofluoromethane	0.0500	0.05123		mg/Kg		102	70 - 130	2	20
Vinyl chloride	0.0500	0.04745		mg/Kg		95	70 - 130	3	20
Dibromomethane	0.0500	0.05059		mg/Kg		101	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	96		70 - 130
1,2-Dichloroethane-d4 (Surr)	98		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-154701/3-A

Matrix: Solid

Analysis Batch: 154695

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154701

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.125		0.125	0.0250	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,1,1-Trichloroethane	<0.125		0.125	0.0182	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,1,2,2-Tetrachloroethane	<0.125		0.125	0.0406	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,1,2-Trichloroethane	<0.125		0.125	0.0325	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,1-Dichloroethane	<0.125		0.125	0.0305	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,1-Dichloroethene	<0.125		0.125	0.0306	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,1-Dichloropropene	<0.125		0.125	0.0355	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,2,3-Trichlorobenzene	<0.125		0.125	0.0266	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,2,3-Trichloropropane	<0.125		0.125	0.0255	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,2,4-Trichlorobenzene	<0.125		0.125	0.0152	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,2,4-Trimethylbenzene	<0.125		0.125	0.0480	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,2-Dibromo-3-Chloropropane	<1.25		1.25	0.125	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,2-Dichlorobenzene	<0.125		0.125	0.0196	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,2-Dichloroethane	<0.125		0.125	0.0126	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,2-Dichloropropane	<0.125		0.125	0.125	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,3,5-Trimethylbenzene	<0.125		0.125	0.0161	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,3-Dichlorobenzene	<0.125		0.125	0.0129	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,3-Dichloropropane	<0.125		0.125	0.0150	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,4-Dichlorobenzene	<0.125		0.125	0.0350	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
1,4-Dioxane	<12.5		12.5	1.21	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
2,2-Dichloropropane	<0.125		0.125	0.0425	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
2-Butanone (MEK)	<1.25		1.25	0.0915	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
2-Chlorotoluene	<0.125		0.125	0.0164	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
2-Hexanone	<1.25		1.25	0.125	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
4-Chlorotoluene	<0.125		0.125	0.0295	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
4-Isopropyltoluene	<0.125		0.125	0.0201	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
4-Methyl-2-pentanone (MIBK)	<1.25		1.25	0.0820	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Acetone	<12.5		12.5	0.211	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Benzene	<0.125		0.125	0.0123	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Bromobenzene	<0.125		0.125	0.0440	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Bromoform	<0.125		0.125	0.125	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Bromomethane	<0.250		0.250	0.0225	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Carbon disulfide	<0.125		0.125	0.125	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Carbon tetrachloride	<0.125		0.125	0.0242	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Chlorobenzene	<0.125		0.125	0.0330	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Chlorobromomethane	<0.125		0.125	0.0181	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Chlorodibromomethane	<0.125		0.125	0.0320	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Chloroethane	<0.250		0.250	0.0565	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Chloroform	<0.125		0.125	0.0155	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Chloromethane	<0.250		0.250	0.0151	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
cis-1,2-Dichloroethene	<0.125		0.125	0.0320	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
cis-1,3-Dichloropropene	<0.125		0.125	0.0360	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Dichlorobromomethane	<0.125		0.125	0.0335	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Dichlorodifluoromethane	<0.250		0.250	0.0207	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Ethyl ether	<0.125		0.125	0.105	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Ethylbenzene	<0.125		0.125	0.0173	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Ethylene Dibromide	<0.125		0.125	0.0321	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Hexachlorobutadiene	<0.125		0.125	0.0293	mg/Kg		11/27/13 11:06	11/27/13 12:48	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-154701/3-A

Matrix: Solid

Analysis Batch: 154695

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154701

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.125		0.125	0.125	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Isopropylbenzene	<0.125		0.125	0.0377	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Methyl tert-butyl ether	<0.125		0.125	0.0246	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Methylene Chloride	<0.125		0.125	0.115	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
m-Xylene & p-Xylene	<0.250		0.250	0.0420	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Naphthalene	<1.25		1.25	0.0335	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
n-Butylbenzene	<0.125		0.125	0.0218	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
N-Propylbenzene	<0.125		0.125	0.0200	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
o-Xylene	<0.125		0.125	0.0327	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
sec-Butylbenzene	<0.125		0.125	0.0218	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Styrene	<0.125		0.125	0.0125	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Tert-amyl methyl ether	<0.125		0.125	0.0640	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Tert-butyl ethyl ether	<0.125		0.125	0.110	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
tert-Butylbenzene	<0.125		0.125	0.0260	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Tetrachloroethene	<0.125		0.125	0.0336	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Tetrahydrofuran	<2.50		2.50	0.230	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Toluene	<0.125		0.125	0.0189	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
trans-1,2-Dichloroethene	<0.125		0.125	0.0258	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
trans-1,3-Dichloropropene	<0.125		0.125	0.110	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Trichloroethene	<0.125		0.125	0.0550	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Trichlorofluoromethane	<0.250		0.250	0.0237	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Vinyl chloride	<0.125		0.125	0.0305	mg/Kg		11/27/13 11:06	11/27/13 12:48	1
Dibromomethane	<0.125		0.125	0.0258	mg/Kg		11/27/13 11:06	11/27/13 12:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		70 - 130	11/27/13 11:06	11/27/13 12:48	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	11/27/13 11:06	11/27/13 12:48	1
4-Bromofluorobenzene (Surr)	94		70 - 130	11/27/13 11:06	11/27/13 12:48	1

Lab Sample ID: LCS 480-154701/1-A

Matrix: Solid

Analysis Batch: 154695

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154701

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	1.25	1.328		mg/Kg		106	70 - 130
1,1,1-Trichloroethane	1.25	1.409		mg/Kg		113	70 - 130
1,1,2,2-Tetrachloroethane	1.25	1.259		mg/Kg		101	70 - 130
1,1,2-Trichloroethane	1.25	1.301		mg/Kg		104	70 - 130
1,1-Dichloroethane	1.25	1.418		mg/Kg		113	70 - 130
1,1-Dichloroethene	1.25	1.395		mg/Kg		112	70 - 130
1,1-Dichloropropene	1.25	1.420		mg/Kg		114	70 - 130
1,2,3-Trichlorobenzene	1.25	1.172		mg/Kg		94	70 - 130
1,2,3-Trichloropropane	1.25	1.270		mg/Kg		102	70 - 130
1,2,4-Trichlorobenzene	1.25	1.191		mg/Kg		95	70 - 130
1,2,4-Trimethylbenzene	1.25	1.292		mg/Kg		103	70 - 130
1,2-Dibromo-3-Chloropropane	1.25	1.133	J	mg/Kg		91	70 - 130
1,2-Dichlorobenzene	1.25	1.267		mg/Kg		101	70 - 130
1,2-Dichloroethane	1.25	1.356		mg/Kg		108	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-154701/1-A

Matrix: Solid

Analysis Batch: 154695

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154701

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	1.25	1.422		mg/Kg		114	70 - 130
1,3,5-Trimethylbenzene	1.25	1.294		mg/Kg		104	70 - 130
1,3-Dichlorobenzene	1.25	1.291		mg/Kg		103	70 - 130
1,3-Dichloropropane	1.25	1.336		mg/Kg		107	70 - 130
1,4-Dichlorobenzene	1.25	1.243		mg/Kg		99	70 - 130
1,4-Dioxane	50.0	50.78		mg/Kg		102	70 - 130
2,2-Dichloropropane	1.25	1.477		mg/Kg		118	70 - 130
2-Butanone (MEK)	6.25	9.063	*	mg/Kg		145	70 - 130
2-Chlorotoluene	1.25	1.526		mg/Kg		122	70 - 130
2-Hexanone	6.25	6.138		mg/Kg		98	70 - 130
4-Chlorotoluene	1.25	1.493		mg/Kg		119	70 - 130
4-Isopropyltoluene	1.25	1.281		mg/Kg		102	70 - 130
4-Methyl-2-pentanone (MIBK)	6.25	6.149		mg/Kg		98	70 - 130
Acetone	6.25	6.256	J	mg/Kg		100	70 - 130
Benzene	1.25	1.407		mg/Kg		113	70 - 130
Bromobenzene	1.25	1.305		mg/Kg		104	70 - 130
Bromoform	1.25	1.233		mg/Kg		99	70 - 130
Bromomethane	1.25	1.391		mg/Kg		111	70 - 130
Carbon disulfide	1.25	1.416		mg/Kg		113	70 - 130
Carbon tetrachloride	1.25	1.443		mg/Kg		115	70 - 130
Chlorobenzene	1.25	1.333		mg/Kg		107	70 - 130
Chlorobromomethane	1.25	1.331		mg/Kg		106	70 - 130
Chlorodibromomethane	1.25	1.344		mg/Kg		107	70 - 130
Chloroethane	1.25	1.481		mg/Kg		118	70 - 130
Chloroform	1.25	1.345		mg/Kg		108	70 - 130
Chloromethane	1.25	1.242		mg/Kg		99	70 - 130
cis-1,2-Dichloroethene	1.25	1.363		mg/Kg		109	70 - 130
cis-1,3-Dichloropropene	1.25	1.466		mg/Kg		117	70 - 130
Dichlorobromomethane	1.25	1.397		mg/Kg		112	70 - 130
Dichlorodifluoromethane	2.50	2.661		mg/Kg		106	70 - 130
Ethyl ether	1.25	1.354		mg/Kg		108	70 - 130
Ethylbenzene	1.25	1.303		mg/Kg		104	70 - 130
Ethylene Dibromide	1.25	1.299		mg/Kg		104	70 - 130
Hexachlorobutadiene	1.25	1.283		mg/Kg		103	70 - 130
Isopropyl ether	1.25	1.367		mg/Kg		109	70 - 130
Isopropylbenzene	1.25	1.288		mg/Kg		103	70 - 130
Methyl tert-butyl ether	1.25	1.357		mg/Kg		109	70 - 130
Methylene Chloride	1.25	1.377		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	2.50	2.693		mg/Kg		108	70 - 130
Naphthalene	1.25	1.114	J	mg/Kg		89	70 - 130
n-Butylbenzene	1.25	1.266		mg/Kg		101	70 - 130
N-Propylbenzene	1.25	1.258		mg/Kg		101	70 - 130
o-Xylene	1.25	1.306		mg/Kg		104	70 - 130
sec-Butylbenzene	1.25	1.300		mg/Kg		104	70 - 130
Styrene	1.25	1.304		mg/Kg		104	70 - 130
Tert-amyl methyl ether	1.25	1.416		mg/Kg		113	70 - 130
Tert-butyl ethyl ether	1.25	1.397		mg/Kg		112	70 - 130
tert-Butylbenzene	1.25	1.322		mg/Kg		106	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-154701/1-A

Matrix: Solid

Analysis Batch: 154695

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154701

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	1.25	1.397		mg/Kg		112	70 - 130
Tetrahydrofuran	6.25	6.345		mg/Kg		102	70 - 130
Toluene	1.25	1.346		mg/Kg		108	70 - 130
trans-1,2-Dichloroethene	1.25	1.400		mg/Kg		112	70 - 130
trans-1,3-Dichloropropene	1.25	1.355		mg/Kg		108	70 - 130
Trichloroethene	1.25	1.395		mg/Kg		112	70 - 130
Trichlorofluoromethane	1.25	1.444		mg/Kg		116	70 - 130
Vinyl chloride	1.25	1.416		mg/Kg		113	70 - 130
Dibromomethane	1.25	1.376		mg/Kg		110	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	107		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 480-154701/2-A

Matrix: Solid

Analysis Batch: 154695

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154701

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	1.25	1.279		mg/Kg		102	70 - 130	4	20
1,1,1-Trichloroethane	1.25	1.305		mg/Kg		104	70 - 130	8	20
1,1,2,2-Tetrachloroethane	1.25	1.228		mg/Kg		98	70 - 130	3	20
1,1,2-Trichloroethane	1.25	1.254		mg/Kg		100	70 - 130	4	20
1,1-Dichloroethane	1.25	1.349		mg/Kg		108	70 - 130	5	20
1,1-Dichloroethene	1.25	1.314		mg/Kg		105	70 - 130	6	20
1,1-Dichloropropene	1.25	1.319		mg/Kg		106	70 - 130	7	20
1,2,3-Trichlorobenzene	1.25	1.190		mg/Kg		95	70 - 130	2	20
1,2,3-Trichloropropane	1.25	1.241		mg/Kg		99	70 - 130	2	20
1,2,4-Trichlorobenzene	1.25	1.189		mg/Kg		95	70 - 130	0	20
1,2,4-Trimethylbenzene	1.25	1.232		mg/Kg		99	70 - 130	5	20
1,2-Dibromo-3-Chloropropane	1.25	1.117	J	mg/Kg		89	70 - 130	1	20
1,2-Dichlorobenzene	1.25	1.225		mg/Kg		98	70 - 130	3	20
1,2-Dichloroethane	1.25	1.291		mg/Kg		103	70 - 130	5	20
1,2-Dichloropropane	1.25	1.366		mg/Kg		109	70 - 130	4	20
1,3,5-Trimethylbenzene	1.25	1.228		mg/Kg		98	70 - 130	5	20
1,3-Dichlorobenzene	1.25	1.235		mg/Kg		99	70 - 130	4	20
1,3-Dichloropropane	1.25	1.294		mg/Kg		104	70 - 130	3	20
1,4-Dichlorobenzene	1.25	1.203		mg/Kg		96	70 - 130	3	20
1,4-Dioxane	50.0	50.95		mg/Kg		102	70 - 130	0	20
2,2-Dichloropropane	1.25	1.376		mg/Kg		110	70 - 130	7	20
2-Butanone (MEK)	6.25	8.873	*	mg/Kg		142	70 - 130	2	20
2-Chlorotoluene	1.25	1.457		mg/Kg		117	70 - 130	5	20
2-Hexanone	6.25	6.136		mg/Kg		98	70 - 130	0	20
4-Chlorotoluene	1.25	1.427		mg/Kg		114	70 - 130	5	20
4-Isopropyltoluene	1.25	1.226		mg/Kg		98	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	6.25	6.121		mg/Kg		98	70 - 130	0	20
Acetone	6.25	6.073	J	mg/Kg		97	70 - 130	3	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-154701/2-A

Matrix: Solid

Analysis Batch: 154695

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154701

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	RPD Limit
Benzene	1.25	1.326		mg/Kg		106	70 - 130		6	20
Bromobenzene	1.25	1.241		mg/Kg		99	70 - 130		5	20
Bromoform	1.25	1.208		mg/Kg		97	70 - 130		2	20
Bromomethane	1.25	1.322		mg/Kg		106	70 - 130		5	20
Carbon disulfide	1.25	1.338		mg/Kg		107	70 - 130		6	20
Carbon tetrachloride	1.25	1.358		mg/Kg		109	70 - 130		6	20
Chlorobenzene	1.25	1.272		mg/Kg		102	70 - 130		5	20
Chlorobromomethane	1.25	1.300		mg/Kg		104	70 - 130		2	20
Chlorodibromomethane	1.25	1.317		mg/Kg		105	70 - 130		2	20
Chloroethane	1.25	1.360		mg/Kg		109	70 - 130		8	20
Chloroform	1.25	1.270		mg/Kg		102	70 - 130		6	20
Chloromethane	1.25	1.142		mg/Kg		91	70 - 130		8	20
cis-1,2-Dichloroethene	1.25	1.281		mg/Kg		102	70 - 130		6	20
cis-1,3-Dichloropropene	1.25	1.413		mg/Kg		113	70 - 130		4	20
Dichlorobromomethane	1.25	1.320		mg/Kg		106	70 - 130		6	20
Dichlorodifluoromethane	2.50	2.465		mg/Kg		99	70 - 130		8	20
Ethyl ether	1.25	1.289		mg/Kg		103	70 - 130		5	20
Ethylbenzene	1.25	1.247		mg/Kg		100	70 - 130		4	20
Ethylene Dibromide	1.25	1.271		mg/Kg		102	70 - 130		2	20
Hexachlorobutadiene	1.25	1.228		mg/Kg		98	70 - 130		4	20
Isopropyl ether	1.25	1.299		mg/Kg		104	70 - 130		5	20
Isopropylbenzene	1.25	1.235		mg/Kg		99	70 - 130		4	20
Methyl tert-butyl ether	1.25	1.335		mg/Kg		107	70 - 130		2	20
Methylene Chloride	1.25	1.316		mg/Kg		105	70 - 130		5	20
m-Xylene & p-Xylene	2.50	2.558		mg/Kg		102	70 - 130		5	20
Naphthalene	1.25	1.160	J	mg/Kg		93	70 - 130		4	20
n-Butylbenzene	1.25	1.217		mg/Kg		97	70 - 130		4	20
N-Propylbenzene	1.25	1.194		mg/Kg		96	70 - 130		5	20
o-Xylene	1.25	1.255		mg/Kg		100	70 - 130		4	20
sec-Butylbenzene	1.25	1.247		mg/Kg		100	70 - 130		4	20
Styrene	1.25	1.251		mg/Kg		100	70 - 130		4	20
Tert-amyl methyl ether	1.25	1.361		mg/Kg		109	70 - 130		4	20
Tert-butyl ethyl ether	1.25	1.340		mg/Kg		107	70 - 130		4	20
tert-Butylbenzene	1.25	1.281		mg/Kg		102	70 - 130		3	20
Tetrachloroethene	1.25	1.331		mg/Kg		107	70 - 130		5	20
Tetrahydrofuran	6.25	6.255		mg/Kg		100	70 - 130		1	20
Toluene	1.25	1.277		mg/Kg		102	70 - 130		5	20
trans-1,2-Dichloroethene	1.25	1.318		mg/Kg		105	70 - 130		6	20
trans-1,3-Dichloropropene	1.25	1.332		mg/Kg		107	70 - 130		2	20
Trichloroethene	1.25	1.304		mg/Kg		104	70 - 130		7	20
Trichlorofluoromethane	1.25	1.340		mg/Kg		107	70 - 130		7	20
Vinyl chloride	1.25	1.297		mg/Kg		104	70 - 130		9	20
Dibromomethane	1.25	1.317		mg/Kg		105	70 - 130		4	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	99		70 - 130
1,2-Dichloroethane-d4 (Surr)	102		70 - 130
4-Bromofluorobenzene (Surr)	96		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Lab Sample ID: MB 240-111692/23-A

Matrix: Solid

Analysis Batch: 112330

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 111692

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0330		0.0330	0.0210	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1221	<0.0330		0.0330	0.0160	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1232	<0.0330		0.0330	0.0140	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1242	<0.0330		0.0330	0.0130	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1248	<0.0330		0.0330	0.0170	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1254	<0.0330		0.0330	0.0170	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1260	<0.0330		0.0330	0.0170	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1262	<0.0330		0.0330	0.0270	mg/Kg		11/29/13 07:58	12/05/13 13:13	1
PCB-1268	<0.0330		0.0330	0.0140	mg/Kg		11/29/13 07:58	12/05/13 13:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		30 - 150	11/29/13 07:58	12/05/13 13:13	1
Tetrachloro-m-xylene	85		30 - 150	11/29/13 07:58	12/05/13 13:13	1
DCB Decachlorobiphenyl	80		30 - 150	11/29/13 07:58	12/05/13 13:13	1
DCB Decachlorobiphenyl	82		30 - 150	11/29/13 07:58	12/05/13 13:13	1

Lab Sample ID: LCS 240-111692/24-A

Matrix: Solid

Analysis Batch: 112117

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 111692

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.333	0.2876		mg/Kg		86	40 - 140
PCB-1260	0.333	0.2978		mg/Kg		89	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	82		30 - 150
Tetrachloro-m-xylene	109		30 - 150
DCB Decachlorobiphenyl	88		30 - 150
DCB Decachlorobiphenyl	78		30 - 150

Lab Sample ID: LCSD 240-111692/25-A

Matrix: Solid

Analysis Batch: 112117

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 111692

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.333	0.2963		mg/Kg		89	40 - 140	3	30
PCB-1260	0.333	0.2912		mg/Kg		87	40 - 140	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	89		30 - 150
Tetrachloro-m-xylene	114		30 - 150
DCB Decachlorobiphenyl	75		30 - 150
DCB Decachlorobiphenyl	67		30 - 150

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: 480-50847-11 MS

Matrix: Solid

Analysis Batch: 112117

Client Sample ID: WCSB-18 (2.5-3)

Prep Type: Total/NA

Prep Batch: 111692

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	<18.1		0.366	<18.1		mg/Kg	✱	NC	40 - 140
PCB-1260	69.4		0.366	67.38	4	mg/Kg	✱	-542	40 - 140

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	0	X	30 - 150
Tetrachloro-m-xylene	0	X	30 - 150
DCB Decachlorobiphenyl	0	X	30 - 150
DCB Decachlorobiphenyl	0	X	30 - 150

Lab Sample ID: 480-50847-11 MSD

Matrix: Solid

Analysis Batch: 112117

Client Sample ID: WCSB-18 (2.5-3)

Prep Type: Total/NA

Prep Batch: 111692

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	<18.1		0.357	<17.7		mg/Kg	✱	NC	40 - 140	NC	50
PCB-1260	69.4		0.357	52.53	4	mg/Kg	✱	-4711	40 - 140	25	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	0	X	30 - 150
Tetrachloro-m-xylene	0	X	30 - 150
DCB Decachlorobiphenyl	0	X	30 - 150
DCB Decachlorobiphenyl	0	X	30 - 150

Lab Sample ID: MB 240-111693/23-A

Matrix: Solid

Analysis Batch: 112327

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 111693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0330		0.0330	0.0210	mg/Kg		11/29/13 08:08	12/05/13 06:30	1
PCB-1221	<0.0330		0.0330	0.0160	mg/Kg		11/29/13 08:08	12/05/13 06:30	1
PCB-1232	<0.0330		0.0330	0.0140	mg/Kg		11/29/13 08:08	12/05/13 06:30	1
PCB-1242	<0.0330		0.0330	0.0130	mg/Kg		11/29/13 08:08	12/05/13 06:30	1
PCB-1248	<0.0330		0.0330	0.0170	mg/Kg		11/29/13 08:08	12/05/13 06:30	1
PCB-1254	<0.0330		0.0330	0.0170	mg/Kg		11/29/13 08:08	12/05/13 06:30	1
PCB-1260	<0.0330		0.0330	0.0170	mg/Kg		11/29/13 08:08	12/05/13 06:30	1
PCB-1262	<0.0330		0.0330	0.0270	mg/Kg		11/29/13 08:08	12/05/13 06:30	1
PCB-1268	<0.0330		0.0330	0.0140	mg/Kg		11/29/13 08:08	12/05/13 06:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	73		30 - 150	11/29/13 08:08	12/05/13 06:30	1
Tetrachloro-m-xylene	86		30 - 150	11/29/13 08:08	12/05/13 06:30	1
DCB Decachlorobiphenyl	60		30 - 150	11/29/13 08:08	12/05/13 06:30	1
DCB Decachlorobiphenyl	74		30 - 150	11/29/13 08:08	12/05/13 06:30	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: LCS 240-111693/24-A

Matrix: Solid

Analysis Batch: 112327

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 111693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.333	0.3135		mg/Kg		94	40 - 140
PCB-1260	0.333	0.3289		mg/Kg		99	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	70		30 - 150
Tetrachloro-m-xylene	146		30 - 150
DCB Decachlorobiphenyl	86		30 - 150
DCB Decachlorobiphenyl	91		30 - 150

Lab Sample ID: LCSD 240-111693/25-A

Matrix: Solid

Analysis Batch: 112327

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 111693

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.333	0.2871		mg/Kg		86	40 - 140	9	30
PCB-1260	0.333	0.2456		mg/Kg		74	40 - 140	29	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	83		30 - 150
Tetrachloro-m-xylene	108		30 - 150
DCB Decachlorobiphenyl	60		30 - 150
DCB Decachlorobiphenyl	91		30 - 150

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 480-154450/1-B

Matrix: Solid

Analysis Batch: 154895

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154450

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.486		0.486	0.0788	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Acenaphthylene	<0.486		0.486	0.0875	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Anthracene	<0.486		0.486	0.0924	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Benzo[a]anthracene	<0.486		0.486	0.0739	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Benzo[a]pyrene	<0.486		0.486	0.0700	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Benzo[b]fluoranthene	<0.486		0.486	0.0691	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Benzo[g,h,i]perylene	<0.486		0.486	0.0827	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Benzo[k]fluoranthene	<0.486		0.486	0.0710	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
2-Methylnaphthalene	<0.486		0.486	0.0953	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Chrysene	<0.486		0.486	0.0866	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Dibenz(a,h)anthracene	0.1989	J	0.486	0.0681	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Fluoranthene	<0.486		0.486	0.0856	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Fluorene	<0.486		0.486	0.0973	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Indeno[1,2,3-cd]pyrene	0.2347	J	0.486	0.0710	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Naphthalene	<0.486		0.486	0.0817	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Phenanthrene	<0.486		0.486	0.0973	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
Pyrene	<0.486		0.486	0.0885	mg/Kg		11/26/13 10:37	11/29/13 14:54	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: MB 480-154450/1-B

Matrix: Solid

Analysis Batch: 154895

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154450

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	<4.86		4.86	1.95	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
C19-C36 Aliphatics	<4.86		4.86	1.95	mg/Kg		11/26/13 10:37	11/29/13 14:54	1
C9-C18 Aliphatics	<4.86		4.86	1.95	mg/Kg		11/26/13 10:37	11/29/13 14:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	80		40 - 140	11/26/13 10:37	11/29/13 14:54	1
2-Bromonaphthalene	82		40 - 140	11/26/13 10:37	11/29/13 14:54	1
2-Fluorobiphenyl	96		40 - 140	11/26/13 10:37	11/29/13 14:54	1
o-Terphenyl	75		40 - 140	11/26/13 10:37	11/29/13 14:54	1

Lab Sample ID: LCS 480-154450/2-B

Matrix: Solid

Analysis Batch: 154895

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154450

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	4.77	2.562		mg/Kg		54	40 - 140
Acenaphthylene	4.77	2.798		mg/Kg		59	40 - 140
Anthracene	4.77	3.465		mg/Kg		73	40 - 140
Benzo[a]anthracene	4.77	3.651		mg/Kg		77	40 - 140
Benzo[a]pyrene	4.77	3.605		mg/Kg		76	40 - 140
Benzo[b]fluoranthene	4.77	3.573		mg/Kg		75	40 - 140
Benzo[g,h,i]perylene	4.77	3.519		mg/Kg		74	40 - 140
Benzo[k]fluoranthene	4.77	3.639		mg/Kg		76	40 - 140
2-Methylnaphthalene	4.77	2.250		mg/Kg		47	40 - 140
Chrysene	4.77	3.681		mg/Kg		77	40 - 140
Dibenz(a,h)anthracene	4.77	3.650		mg/Kg		77	40 - 140
Fluoranthene	4.77	3.600		mg/Kg		75	40 - 140
Fluorene	4.77	3.036		mg/Kg		64	40 - 140
Indeno[1,2,3-cd]pyrene	4.77	3.570		mg/Kg		75	40 - 140
Naphthalene	4.77	2.096		mg/Kg		44	40 - 140
Phenanthrene	4.77	3.403		mg/Kg		71	40 - 140
Pyrene	4.77	3.699		mg/Kg		78	40 - 140
C11-C22 Aromatics (unadjusted)	81.1	55.87		mg/Kg		69	40 - 140
C19-C36 Aliphatics	38.2	29.51		mg/Kg		77	40 - 140
C9-C18 Aliphatics	28.6	17.82		mg/Kg		62	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	74		40 - 140
2-Bromonaphthalene	66		40 - 140
2-Fluorobiphenyl	83		40 - 140
o-Terphenyl	68		40 - 140

Lab Sample ID: LCSD 480-154450/3-B

Matrix: Solid

Analysis Batch: 154895

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154450

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Acenaphthene	4.84	2.749		mg/Kg		57	40 - 140	7	25

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCSD 480-154450/3-B

Matrix: Solid

Analysis Batch: 154895

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154450

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	Limit
Acenaphthylene	4.84	2.801		mg/Kg		58	40 - 140		0	25
Anthracene	4.84	3.503		mg/Kg		72	40 - 140		1	25
Benzo[a]anthracene	4.84	3.741		mg/Kg		77	40 - 140		2	25
Benzo[a]pyrene	4.84	3.675		mg/Kg		76	40 - 140		2	25
Benzo[b]fluoranthene	4.84	3.645		mg/Kg		75	40 - 140		2	25
Benzo[g,h,i]perylene	4.84	3.639		mg/Kg		75	40 - 140		3	25
Benzo[k]fluoranthene	4.84	3.744		mg/Kg		77	40 - 140		3	25
2-Methylnaphthalene	4.84	2.388		mg/Kg		49	40 - 140		6	25
Chrysene	4.84	3.780		mg/Kg		78	40 - 140		3	25
Dibenz(a,h)anthracene	4.84	3.697		mg/Kg		76	40 - 140		1	25
Fluoranthene	4.84	3.679		mg/Kg		76	40 - 140		2	25
Fluorene	4.84	3.067		mg/Kg		63	40 - 140		1	25
Indeno[1,2,3-cd]pyrene	4.84	3.633		mg/Kg		75	40 - 140		2	25
Naphthalene	4.84	2.146		mg/Kg		44	40 - 140		2	25
Phenanthrene	4.84	3.440		mg/Kg		71	40 - 140		1	25
Pyrene	4.84	3.757		mg/Kg		78	40 - 140		2	25
C11-C22 Aromatics (unadjusted)	82.2	57.37		mg/Kg		70	40 - 140		3	25
C19-C36 Aliphatics	38.7	29.07		mg/Kg		75	40 - 140		2	25
C9-C18 Aliphatics	29.0	15.92		mg/Kg		55	40 - 140		11	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctadecane	72		40 - 140
2-Bromonaphthalene	74		40 - 140
2-Fluorobiphenyl	89		40 - 140
o-Terphenyl	66		40 - 140

Lab Sample ID: MB 480-155085/1-B

Matrix: Solid

Analysis Batch: 155521

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 155085

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	<0.463		0.463	0.0749	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Acenaphthylene	<0.463		0.463	0.0833	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Anthracene	<0.463		0.463	0.0879	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Benzo[a]anthracene	<0.463		0.463	0.0703	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Benzo[a]pyrene	<0.463		0.463	0.0666	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Benzo[b]fluoranthene	<0.463		0.463	0.0657	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Benzo[g,h,i]perylene	0.6319		0.463	0.0786	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Benzo[k]fluoranthene	<0.463		0.463	0.0675	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
2-Methylnaphthalene	<0.463		0.463	0.0907	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Chrysene	<0.463		0.463	0.0823	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Dibenz(a,h)anthracene	0.3201	J	0.463	0.0648	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Fluoranthene	<0.463		0.463	0.0814	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Fluorene	<0.463		0.463	0.0925	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Indeno[1,2,3-cd]pyrene	0.3881	J	0.463	0.0675	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Naphthalene	<0.463		0.463	0.0777	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Phenanthrene	<0.463		0.463	0.0925	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
Pyrene	<0.463		0.463	0.0842	mg/Kg		12/02/13 09:26	12/04/13 09:25	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: MB 480-155085/1-B

Matrix: Solid

Analysis Batch: 155521

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 155085

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (unadjusted)	2.041	J	4.63	1.85	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
C19-C36 Aliphatics	2.629	J	4.63	1.85	mg/Kg		12/02/13 09:26	12/04/13 09:25	1
C9-C18 Aliphatics	<4.63		4.63	1.85	mg/Kg		12/02/13 09:26	12/04/13 09:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	74		40 - 140	12/02/13 09:26	12/04/13 09:25	1
2-Bromonaphthalene	66		40 - 140	12/02/13 09:26	12/04/13 09:25	1
2-Fluorobiphenyl	89		40 - 140	12/02/13 09:26	12/04/13 09:25	1
o-Terphenyl	69		40 - 140	12/02/13 09:26	12/04/13 09:25	1

Lab Sample ID: LCS 480-155085/2-B

Matrix: Solid

Analysis Batch: 155521

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 155085

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	4.78	2.233		mg/Kg		47	40 - 140
Acenaphthylene	4.78	2.697		mg/Kg		56	40 - 140
Anthracene	4.78	3.279		mg/Kg		69	40 - 140
Benzo[a]anthracene	4.78	3.464		mg/Kg		73	40 - 140
Benzo[a]pyrene	4.78	3.400		mg/Kg		71	40 - 140
Benzo[b]fluoranthene	4.78	3.353		mg/Kg		70	40 - 140
Benzo[g,h,i]perylene	4.78	3.066		mg/Kg		64	40 - 140
Benzo[k]fluoranthene	4.78	3.462		mg/Kg		72	40 - 140
2-Methylnaphthalene	4.78	1.968		mg/Kg		41	40 - 140
Chrysene	4.78	3.483		mg/Kg		73	40 - 140
Dibenz(a,h)anthracene	4.78	3.261		mg/Kg		68	40 - 140
Fluoranthene	4.78	3.418		mg/Kg		72	40 - 140
Fluorene	4.78	2.908		mg/Kg		61	40 - 140
Indeno[1,2,3-cd]pyrene	4.78	3.119		mg/Kg		65	40 - 140
Naphthalene	4.78	1.823	*	mg/Kg		38	40 - 140
Phenanthrene	4.78	3.242		mg/Kg		68	40 - 140
Pyrene	4.78	3.515		mg/Kg		74	40 - 140
C11-C22 Aromatics (unadjusted)	81.2	51.97		mg/Kg		64	40 - 140
C19-C36 Aliphatics	38.2	28.71		mg/Kg		75	40 - 140
C9-C18 Aliphatics	28.7	18.07		mg/Kg		63	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	72		40 - 140
2-Bromonaphthalene	62		40 - 140
2-Fluorobiphenyl	83		40 - 140
o-Terphenyl	63		40 - 140

Lab Sample ID: LCSD 480-155085/3-B

Matrix: Solid

Analysis Batch: 155521

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 155085

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Acenaphthene	4.91	2.617		mg/Kg		53	40 - 140	16	25

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCSD 480-155085/3-B

Matrix: Solid

Analysis Batch: 155521

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 155085

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	4.91	2.932		mg/Kg		60	40 - 140	8	25
Anthracene	4.91	3.657		mg/Kg		75	40 - 140	11	25
Benzo[a]anthracene	4.91	3.951		mg/Kg		81	40 - 140	13	25
Benzo[a]pyrene	4.91	3.838		mg/Kg		78	40 - 140	12	25
Benzo[b]fluoranthene	4.91	3.864		mg/Kg		79	40 - 140	14	25
Benzo[g,h,i]perylene	4.91	3.551		mg/Kg		72	40 - 140	15	25
Benzo[k]fluoranthene	4.91	3.881		mg/Kg		79	40 - 140	11	25
2-Methylnaphthalene	4.91	2.283		mg/Kg		47	40 - 140	15	25
Chrysene	4.91	3.966		mg/Kg		81	40 - 140	13	25
Dibenz(a,h)anthracene	4.91	3.759		mg/Kg		77	40 - 140	14	25
Fluoranthene	4.91	3.818		mg/Kg		78	40 - 140	11	25
Fluorene	4.91	3.197		mg/Kg		65	40 - 140	9	25
Indeno[1,2,3-cd]pyrene	4.91	3.604		mg/Kg		73	40 - 140	14	25
Naphthalene	4.91	2.098		mg/Kg		43	40 - 140	14	25
Phenanthrene	4.91	3.571		mg/Kg		73	40 - 140	10	25
Pyrene	4.91	3.906		mg/Kg		80	40 - 140	11	25
C11-C22 Aromatics (unadjusted)	83.4	58.81		mg/Kg		71	40 - 140	12	25
C19-C36 Aliphatics	39.3	33.46		mg/Kg		85	40 - 140	15	25
C9-C18 Aliphatics	29.4	19.28		mg/Kg		66	40 - 140	7	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctadecane	79		40 - 140
2-Bromonaphthalene	69		40 - 140
2-Fluorobiphenyl	91		40 - 140
o-Terphenyl	67		40 - 140

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-154525/1-A

Matrix: Solid

Analysis Batch: 155180

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154525

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.539		0.539	0.216	mg/Kg		11/27/13 15:15	11/30/13 19:16	1
Arsenic	<1.08		1.08	0.431	mg/Kg		11/27/13 15:15	11/30/13 19:16	1
Barium	<0.539		0.539	0.119	mg/Kg		11/27/13 15:15	11/30/13 19:16	1
Beryllium	<0.216		0.216	0.0302	mg/Kg		11/27/13 15:15	11/30/13 19:16	1
Cadmium	<0.216		0.216	0.0323	mg/Kg		11/27/13 15:15	11/30/13 19:16	1
Chromium	<0.539		0.539	0.216	mg/Kg		11/27/13 15:15	11/30/13 19:16	1
Nickel	<1.08		1.08	0.248	mg/Kg		11/27/13 15:15	11/30/13 19:16	1
Thallium	<1.08		1.08	0.323	mg/Kg		11/27/13 15:15	11/30/13 19:16	1
Vanadium	<0.539		0.539	0.119	mg/Kg		11/27/13 15:15	11/30/13 19:16	1
Zinc	0.4021	J	2.70	0.165	mg/Kg		11/27/13 15:15	11/30/13 19:16	1
Lead	<0.539		0.539	0.259	mg/Kg		11/27/13 15:15	11/30/13 19:16	1
Selenium	<0.539		0.539	0.431	mg/Kg		11/27/13 15:15	11/30/13 19:16	1
Antimony	<0.539		0.539	0.431	mg/Kg		11/27/13 15:15	11/30/13 19:16	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-154525/3-A LCDSRM

Matrix: Solid

Analysis Batch: 155180

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154525

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	40.5	39.56		mg/Kg		97.7	65.8 - 133.7	3	20
Arsenic	99.8	101.5		mg/Kg		101.7	69.3 - 130.5	1	20
Barium	311	295.2		mg/Kg		95.0	74.2 - 126.1	0	20
Beryllium	72.4	74.38		mg/Kg		102.7	73.9 - 126.1	2	20
Cadmium	182	177.2		mg/Kg		97.2	73.6 - 126.4	3	20
Chromium	136	136.9		mg/Kg		100.5	70.4 - 130.1	2	20
Nickel	153	162.6		mg/Kg		106.1	73.2 - 126.1	6	20
Thallium	174	181.9		mg/Kg		104.3	69.0 - 131.6	2	20
Vanadium	97.8	97.88		mg/Kg		100.1	65.2 - 135.2	4	20
Zinc	161	157.9		mg/Kg		97.9	68.3 - 131.7	2	20
Lead	115	117.9		mg/Kg		102.3	72.1 - 128.7	1	20
Selenium	150	148.8		mg/Kg		99.0	67.3 - 132.7	1	20
Antimony	88.4	93.82		mg/Kg		106.2	26.3 - 289.1	0	20

Lab Sample ID: LCSSRM 480-154525/2-A

Matrix: Solid

Analysis Batch: 155180

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154525

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	40.4	40.83		mg/Kg		101.0	65.8 - 133.7		
Arsenic	99.7	100.9		mg/Kg		101.2	69.3 - 130.5		
Barium	310	295.0		mg/Kg		95.1	74.2 - 126.1		
Beryllium	72.3	75.75		mg/Kg		104.7	73.9 - 126.1		
Cadmium	182	182.3		mg/Kg		100.1	73.6 - 126.4		
Chromium	136	140.3		mg/Kg		103.1	70.4 - 130.1		
Nickel	153	172.3		mg/Kg		112.6	73.2 - 126.1		
Thallium	174	177.9		mg/Kg		102.2	69.0 - 131.6		
Vanadium	97.7	101.8		mg/Kg		104.2	65.2 - 135.2		
Zinc	161	160.6		mg/Kg		99.7	68.3 - 131.7		
Lead	115	118.9		mg/Kg		103.4	72.1 - 128.7		

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-154525/2-A

Matrix: Solid

Analysis Batch: 155180

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154525

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	150	150.3		mg/Kg		100.1	67.3 - 132.7
Antimony	88.3	94.26		mg/Kg		106.8	26.3 - 289.1

Lab Sample ID: 480-50847-25MS

Matrix: Solid

Analysis Batch: 155180

Client Sample ID: WCSB-11 (6-7) MS

Prep Type: Total/NA

Prep Batch: 154525

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.67		43.3	38.76		mg/Kg	☼	79	75 - 125
Barium	24.1		43.3	68.84		mg/Kg	☼	103	75 - 125
Beryllium	0.368		43.3	35.17		mg/Kg	☼	80	75 - 125
Cadmium	0.249		43.3	34.56		mg/Kg	☼	79	75 - 125
Chromium	7.16		43.3	37.15	F	mg/Kg	☼	69	75 - 125
Nickel	8.01		43.3	49.92		mg/Kg	☼	97	75 - 125
Thallium	<1.09		43.3	41.65		mg/Kg	☼	96	75 - 125
Vanadium	5.68		43.3	41.00		mg/Kg	☼	82	75 - 125
Zinc	88.3	B	43.3	155.2	F	mg/Kg	☼	155	75 - 125
Lead	18.2		43.3	66.09		mg/Kg	☼	111	75 - 125
Selenium	<0.544		43.3	34.26		mg/Kg	☼	79	75 - 125
Antimony	<0.544		43.3	31.92	F	mg/Kg	☼	74	75 - 125

Lab Sample ID: 480-50847-25MS

Matrix: Solid

Analysis Batch: 155818

Client Sample ID: WCSB-11 (6-7) MS

Prep Type: Total/NA

Prep Batch: 154525

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<2.72		10.8	9.343		mg/Kg	☼	86	75 - 125

Lab Sample ID: 480-50847-25MSD

Matrix: Solid

Analysis Batch: 155180

Client Sample ID: WCSB-11 (6-7) MSD

Prep Type: Total/NA

Prep Batch: 154525

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.67		45.0	42.87		mg/Kg	☼	85	75 - 125	10	35
Barium	24.1		45.0	74.75		mg/Kg	☼	113	75 - 125	8	35
Beryllium	0.368		45.0	39.62		mg/Kg	☼	87	75 - 125	12	35
Cadmium	0.249		45.0	38.65		mg/Kg	☼	85	75 - 125	11	35
Chromium	7.16		45.0	42.87		mg/Kg	☼	79	75 - 125	14	35
Nickel	8.01		45.0	53.93		mg/Kg	☼	102	75 - 125	8	35
Thallium	<1.09		45.0	43.42		mg/Kg	☼	97	75 - 125	4	35
Vanadium	5.68		45.0	46.25		mg/Kg	☼	90	75 - 125	12	35
Zinc	88.3	B	45.0	151.0	F	mg/Kg	☼	140	75 - 125	3	35
Lead	18.2		45.0	67.08		mg/Kg	☼	109	75 - 125	1	35
Selenium	<0.544		45.0	38.17		mg/Kg	☼	85	75 - 125	11	35
Antimony	<0.544		45.0	35.10		mg/Kg	☼	78	75 - 125	10	35

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: 480-50847-25MSD

Matrix: Solid

Analysis Batch: 155818

Client Sample ID: WCSB-11 (6-7) MSD

Prep Type: Total/NA

Prep Batch: 154525

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<2.72		11.2	10.33		mg/Kg	☼	92	75 - 125	10	35

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-154829/1-A

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 154829

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0993		0.0993	0.00804	mg/Kg		11/29/13 08:40	11/29/13 15:50	1

Lab Sample ID: LCDSRM 480-154829/3-A LCDSRM

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 154829

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.77	2.043		mg/Kg		54.2	50.9 - 149.1	4	

Lab Sample ID: LCSSRM 480-154829/2-A

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 154829

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.77	1.963		mg/Kg		52.1	50.9 - 149.1		

Lab Sample ID: 480-50847-25MS

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: WCSB-11 (6-7) MS

Prep Type: Total/NA

Prep Batch: 154829

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0158	J	0.330	0.2151	F	mg/Kg	☼	60	75 - 125		

Lab Sample ID: 480-50847-25MSD

Matrix: Solid

Analysis Batch: 155027

Client Sample ID: WCSB-11 (6-7) MSD

Prep Type: Total/NA

Prep Batch: 154829

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.0158	J	0.320	0.2001	F	mg/Kg	☼	58	75 - 125	7	35

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

GC/MS VOA

Analysis Batch: 154424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-3	WCSB-4 (1-2)	Total/NA	Solid	8260C	154449
480-50847-15	WCSB-16 (6-7)	Total/NA	Solid	8260C	154449
480-50847-16	WCSB-15 (0.5-1.5)	Total/NA	Solid	8260C	154449
480-50847-19	WCSB-14 (7-8)	Total/NA	Solid	8260C	154449
480-50847-22	WCSB-12 (2.5-3)	Total/NA	Solid	8260C	154449
480-50847-27	TB-11222013 (2)	Total/NA	Solid	8260C	154449
LCS 480-154424/4	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 480-154424/5	Lab Control Sample Dup	Total/NA	Solid	8260C	
MB 480-154424/6	Method Blank	Total/NA	Solid	8260C	

Prep Batch: 154449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-3	WCSB-4 (1-2)	Total/NA	Solid	5035	
480-50847-15	WCSB-16 (6-7)	Total/NA	Solid	5035	
480-50847-16	WCSB-15 (0.5-1.5)	Total/NA	Solid	5035	
480-50847-19	WCSB-14 (7-8)	Total/NA	Solid	5035	
480-50847-22	WCSB-12 (2.5-3)	Total/NA	Solid	5035	
480-50847-27	TB-11222013 (2)	Total/NA	Solid	5035	

Analysis Batch: 154695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-3 - DL	WCSB-4 (1-2)	Total/NA	Solid	8260C	154701
LCS 480-154701/1-A	Lab Control Sample	Total/NA	Solid	8260C	154701
LCSD 480-154701/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	154701
MB 480-154701/3-A	Method Blank	Total/NA	Solid	8260C	154701

Prep Batch: 154701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-3 - DL	WCSB-4 (1-2)	Total/NA	Solid	5035	
LCS 480-154701/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 480-154701/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 480-154701/3-A	Method Blank	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 111692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-1	WCSB-20 (14-15)	Total/NA	Solid	3540C	
480-50847-5	WCSB-22 (2.5-3)	Total/NA	Solid	3540C	
480-50847-7	WCSB-21 (2.5-3)	Total/NA	Solid	3540C	
480-50847-9	WCSB-19 (2.5-3)	Total/NA	Solid	3540C	
480-50847-11	WCSB-18 (2.5-3)	Total/NA	Solid	3540C	
480-50847-11 MS	WCSB-18 (2.5-3)	Total/NA	Solid	3540C	
480-50847-11 MSD	WCSB-18 (2.5-3)	Total/NA	Solid	3540C	
480-50847-13	WCSB-17 (2.5-3)	Total/NA	Solid	3540C	
LCS 240-111692/24-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-111692/25-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-111692/23-A	Method Blank	Total/NA	Solid	3540C	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

GC Semi VOA (Continued)

Prep Batch: 111693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-17	WCSB-15 (2.5-3)	Total/NA	Solid	3540C	
480-50847-20	WCSB-13 (2.5-3)	Total/NA	Solid	3540C	
480-50847-22	WCSB-12 (2.5-3)	Total/NA	Solid	3540C	
480-50847-24	WCSB-912 (2.5-3)	Total/NA	Solid	3540C	
480-50847-26	WCSB-7 (7-8)	Total/NA	Solid	3540C	
LCS 240-111693/24-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-111693/25-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-111693/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 112117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-5	WCSB-22 (2.5-3)	Total/NA	Solid	8082	111692
480-50847-7	WCSB-21 (2.5-3)	Total/NA	Solid	8082	111692
480-50847-9	WCSB-19 (2.5-3)	Total/NA	Solid	8082	111692
480-50847-11	WCSB-18 (2.5-3)	Total/NA	Solid	8082	111692
480-50847-11 MS	WCSB-18 (2.5-3)	Total/NA	Solid	8082	111692
480-50847-11 MSD	WCSB-18 (2.5-3)	Total/NA	Solid	8082	111692
480-50847-13	WCSB-17 (2.5-3)	Total/NA	Solid	8082	111692
LCS 240-111692/24-A	Lab Control Sample	Total/NA	Solid	8082	111692
LCSD 240-111692/25-A	Lab Control Sample Dup	Total/NA	Solid	8082	111692

Analysis Batch: 112327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-17	WCSB-15 (2.5-3)	Total/NA	Solid	8082	111693
480-50847-20	WCSB-13 (2.5-3)	Total/NA	Solid	8082	111693
480-50847-22	WCSB-12 (2.5-3)	Total/NA	Solid	8082	111693
480-50847-24	WCSB-912 (2.5-3)	Total/NA	Solid	8082	111693
480-50847-26	WCSB-7 (7-8)	Total/NA	Solid	8082	111693
LCS 240-111693/24-A	Lab Control Sample	Total/NA	Solid	8082	111693
LCSD 240-111693/25-A	Lab Control Sample Dup	Total/NA	Solid	8082	111693
MB 240-111693/23-A	Method Blank	Total/NA	Solid	8082	111693

Analysis Batch: 112330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-1	WCSB-20 (14-15)	Total/NA	Solid	8082	111692
MB 240-111692/23-A	Method Blank	Total/NA	Solid	8082	111692

Prep Batch: 154450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-1	WCSB-20 (14-15)	Total/NA	Solid	3546	
480-50847-5	WCSB-22 (2.5-3)	Total/NA	Solid	3546	
480-50847-7	WCSB-21 (2.5-3)	Total/NA	Solid	3546	
480-50847-13	WCSB-17 (2.5-3)	Total/NA	Solid	3546	
480-50847-19	WCSB-14 (7-8)	Total/NA	Solid	3546	
LCS 480-154450/2-B	Lab Control Sample	Total/NA	Solid	3546	
LCSD 480-154450/3-B	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 480-154450/1-B	Method Blank	Total/NA	Solid	3546	

Fraction Batch: 154639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-1	WCSB-20 (14-15)	Total/NA	Solid	MA EPH Frac	154450

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

GC Semi VOA (Continued)

Fraction Batch: 154639 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-5	WCSB-22 (2.5-3)	Total/NA	Solid	MA EPH Frac	154450
480-50847-7	WCSB-21 (2.5-3)	Total/NA	Solid	MA EPH Frac	154450
480-50847-13	WCSB-17 (2.5-3)	Total/NA	Solid	MA EPH Frac	154450
480-50847-19	WCSB-14 (7-8)	Total/NA	Solid	MA EPH Frac	154450
LCS 480-154450/2-B	Lab Control Sample	Total/NA	Solid	MA EPH Frac	154450
LCSD 480-154450/3-B	Lab Control Sample Dup	Total/NA	Solid	MA EPH Frac	154450
MB 480-154450/1-B	Method Blank	Total/NA	Solid	MA EPH Frac	154450

Analysis Batch: 154895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-1	WCSB-20 (14-15)	Total/NA	Solid	MA-EPH	154639
480-50847-5	WCSB-22 (2.5-3)	Total/NA	Solid	MA-EPH	154639
480-50847-7	WCSB-21 (2.5-3)	Total/NA	Solid	MA-EPH	154639
480-50847-13	WCSB-17 (2.5-3)	Total/NA	Solid	MA-EPH	154639
480-50847-19	WCSB-14 (7-8)	Total/NA	Solid	MA-EPH	154639
LCS 480-154450/2-B	Lab Control Sample	Total/NA	Solid	MA-EPH	154639
LCSD 480-154450/3-B	Lab Control Sample Dup	Total/NA	Solid	MA-EPH	154639
MB 480-154450/1-B	Method Blank	Total/NA	Solid	MA-EPH	154639

Prep Batch: 155085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-9	WCSB-19 (2.5-3)	Total/NA	Solid	3546	
LCS 480-155085/2-B	Lab Control Sample	Total/NA	Solid	3546	
LCSD 480-155085/3-B	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 480-155085/1-B	Method Blank	Total/NA	Solid	3546	

Fraction Batch: 155270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-9	WCSB-19 (2.5-3)	Total/NA	Solid	MA EPH Frac	155085
LCS 480-155085/2-B	Lab Control Sample	Total/NA	Solid	MA EPH Frac	155085
LCSD 480-155085/3-B	Lab Control Sample Dup	Total/NA	Solid	MA EPH Frac	155085
MB 480-155085/1-B	Method Blank	Total/NA	Solid	MA EPH Frac	155085

Analysis Batch: 155390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-1	WCSB-20 (14-15)	Total/NA	Solid	MA-EPH	
480-50847-5	WCSB-22 (2.5-3)	Total/NA	Solid	MA-EPH	
480-50847-7	WCSB-21 (2.5-3)	Total/NA	Solid	MA-EPH	
480-50847-9	WCSB-19 (2.5-3)	Total/NA	Solid	MA-EPH	
480-50847-13	WCSB-17 (2.5-3)	Total/NA	Solid	MA-EPH	
480-50847-19	WCSB-14 (7-8)	Total/NA	Solid	MA-EPH	

Analysis Batch: 155521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-9	WCSB-19 (2.5-3)	Total/NA	Solid	MA-EPH	155270
LCS 480-155085/2-B	Lab Control Sample	Total/NA	Solid	MA-EPH	155270
LCSD 480-155085/3-B	Lab Control Sample Dup	Total/NA	Solid	MA-EPH	155270
MB 480-155085/1-B	Method Blank	Total/NA	Solid	MA-EPH	155270

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Metals

Prep Batch: 154525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-4	WCSB-4 (7-8)	Total/NA	Solid	3050B	
480-50847-25	WCSB-11 (6-7)	Total/NA	Solid	3050B	
480-50847-25MS	WCSB-11 (6-7) MS	Total/NA	Solid	3050B	
480-50847-25MSD	WCSB-11 (6-7) MSD	Total/NA	Solid	3050B	
480-50847-26	WCSB-7 (7-8)	Total/NA	Solid	3050B	
LCDSRM 480-154525/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-154525/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-154525/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 154829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-4	WCSB-4 (7-8)	Total/NA	Solid	7471A	
480-50847-25	WCSB-11 (6-7)	Total/NA	Solid	7471A	
480-50847-25MS	WCSB-11 (6-7) MS	Total/NA	Solid	7471A	
480-50847-25MSD	WCSB-11 (6-7) MSD	Total/NA	Solid	7471A	
480-50847-26	WCSB-7 (7-8)	Total/NA	Solid	7471A	
LCDSRM 480-154829/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-154829/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-154829/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 155027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-4	WCSB-4 (7-8)	Total/NA	Solid	7471A	154829
480-50847-25	WCSB-11 (6-7)	Total/NA	Solid	7471A	154829
480-50847-25MS	WCSB-11 (6-7) MS	Total/NA	Solid	7471A	154829
480-50847-25MSD	WCSB-11 (6-7) MSD	Total/NA	Solid	7471A	154829
480-50847-26	WCSB-7 (7-8)	Total/NA	Solid	7471A	154829
LCDSRM 480-154829/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	7471A	154829
LCSSRM 480-154829/2-A	Lab Control Sample	Total/NA	Solid	7471A	154829
MB 480-154829/1-A	Method Blank	Total/NA	Solid	7471A	154829

Analysis Batch: 155180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-4	WCSB-4 (7-8)	Total/NA	Solid	6010	154525
480-50847-25	WCSB-11 (6-7)	Total/NA	Solid	6010	154525
480-50847-25MS	WCSB-11 (6-7) MS	Total/NA	Solid	6010	154525
480-50847-25MSD	WCSB-11 (6-7) MSD	Total/NA	Solid	6010	154525
480-50847-26	WCSB-7 (7-8)	Total/NA	Solid	6010	154525
LCDSRM 480-154525/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	6010	154525
LCSSRM 480-154525/2-A	Lab Control Sample	Total/NA	Solid	6010	154525
MB 480-154525/1-A	Method Blank	Total/NA	Solid	6010	154525

Analysis Batch: 155818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-25	WCSB-11 (6-7)	Total/NA	Solid	6010	154525
480-50847-25MS	WCSB-11 (6-7) MS	Total/NA	Solid	6010	154525
480-50847-25MSD	WCSB-11 (6-7) MSD	Total/NA	Solid	6010	154525

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

General Chemistry

Analysis Batch: 111911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-1	WCSB-20 (14-15)	Total/NA	Solid	Moisture	
480-50847-5	WCSB-22 (2.5-3)	Total/NA	Solid	Moisture	
480-50847-7	WCSB-21 (2.5-3)	Total/NA	Solid	Moisture	
480-50847-9	WCSB-19 (2.5-3)	Total/NA	Solid	Moisture	
480-50847-11	WCSB-18 (2.5-3)	Total/NA	Solid	Moisture	
480-50847-13	WCSB-17 (2.5-3)	Total/NA	Solid	Moisture	
480-50847-17	WCSB-15 (2.5-3)	Total/NA	Solid	Moisture	
480-50847-17 DU	WCSB-15 (2.5-3)	Total/NA	Solid	Moisture	
480-50847-20	WCSB-13 (2.5-3)	Total/NA	Solid	Moisture	
480-50847-22	WCSB-12 (2.5-3)	Total/NA	Solid	Moisture	
480-50847-24	WCSB-912 (2.5-3)	Total/NA	Solid	Moisture	
480-50847-26	WCSB-7 (7-8)	Total/NA	Solid	Moisture	

Analysis Batch: 154545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-3	WCSB-4 (1-2)	Total/NA	Solid	Moisture	
480-50847-4	WCSB-4 (7-8)	Total/NA	Solid	Moisture	
480-50847-15	WCSB-16 (6-7)	Total/NA	Solid	Moisture	
480-50847-16	WCSB-15 (0.5-1.5)	Total/NA	Solid	Moisture	
480-50847-19	WCSB-14 (7-8)	Total/NA	Solid	Moisture	
480-50847-25MS	WCSB-11 (6-7) MS	Total/NA	Solid	Moisture	
480-50847-25MSD	WCSB-11 (6-7) MSD	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-20 (14-15)

Date Collected: 11/22/13 12:15

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-1

Matrix: Solid

Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	8082		500	112330	12/05/13 12:42	LSH	TAL CAN
Total/NA	Fraction	MA EPH Frac			154639	11/27/13 08:07	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	154895	11/29/13 17:51	DGB	TAL BUF
Total/NA	Prep	3546			154450	11/26/13 10:37	CAM	TAL BUF
Total/NA	Analysis	MA-EPH		1	155390	12/03/13 12:12	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSB-4 (1-2)

Date Collected: 11/22/13 13:05

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-3

Matrix: Solid

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			154449	11/26/13 10:30	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	154424	11/26/13 16:47	CDC	TAL BUF
Total/NA	Prep	5035	DL		154701	11/27/13 11:06	LCH	TAL BUF
Total/NA	Analysis	8260C	DL	1	154695	11/27/13 19:46	RAL	TAL BUF
Total/NA	Analysis	Moisture		1	154545	11/26/13 19:24	GTG	TAL BUF

Client Sample ID: WCSB-4 (7-8)

Date Collected: 11/22/13 13:10

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-4

Matrix: Solid

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			154829	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 16:06	JRK	TAL BUF
Total/NA	Prep	3050B			154525	11/27/13 15:15	NMD2	TAL BUF
Total/NA	Analysis	6010		1	155180	11/30/13 19:58	MTM2	TAL BUF
Total/NA	Analysis	Moisture		1	154545	11/26/13 19:24	GTG	TAL BUF

Client Sample ID: WCSB-22 (2.5-3)

Date Collected: 11/22/13 13:30

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-5

Matrix: Solid

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		100	112117	12/03/13 19:27	LSH	TAL CAN
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Prep	3546			154450	11/26/13 10:37	CAM	TAL BUF
Total/NA	Fraction	MA EPH Frac			154639	11/27/13 08:07	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	154895	11/29/13 18:21	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	155390	12/03/13 12:12	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-21 (2.5-3)

Lab Sample ID: 480-50847-7

Date Collected: 11/22/13 13:55

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 95.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	8082		1	112117	12/03/13 19:43	LSH	TAL CAN
Total/NA	Fraction	MA EPH Frac			154639	11/27/13 08:07	KEB	TAL BUF
Total/NA	Prep	3546			154450	11/26/13 10:37	CAM	TAL BUF
Total/NA	Analysis	MA-EPH		1	154895	11/29/13 18:50	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	155390	12/03/13 12:12	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSB-19 (2.5-3)

Lab Sample ID: 480-50847-9

Date Collected: 11/22/13 14:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	8082		1	112117	12/03/13 19:59	LSH	TAL CAN
Total/NA	Analysis	MA-EPH		1	155390	12/03/13 12:12	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			155270	12/03/13 06:25	KEB	TAL BUF
Total/NA	Prep	3546			155085	12/02/13 09:26	CAM	TAL BUF
Total/NA	Analysis	MA-EPH		1	155521	12/04/13 10:54	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSB-18 (2.5-3)

Lab Sample ID: 480-50847-11

Date Collected: 11/22/13 14:20

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Analysis	8082		500	112117	12/03/13 20:46	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSB-17 (2.5-3)

Lab Sample ID: 480-50847-13

Date Collected: 11/22/13 14:35

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1000	112117	12/03/13 20:15	LSH	TAL CAN
Total/NA	Prep	3540C			111692	11/29/13 07:58	MPM	TAL CAN
Total/NA	Fraction	MA EPH Frac			154639	11/27/13 08:07	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	154895	11/29/13 20:18	DGB	TAL BUF
Total/NA	Prep	3546			154450	11/26/13 10:37	CAM	TAL BUF
Total/NA	Analysis	MA-EPH		1	155390	12/03/13 12:12	DGB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-17 (2.5-3)

Lab Sample ID: 480-50847-13

Date Collected: 11/22/13 14:35

Matrix: Solid

Date Received: 11/26/13 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSB-16 (6-7)

Lab Sample ID: 480-50847-15

Date Collected: 11/22/13 14:55

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 68.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			154449	11/26/13 10:30	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	154424	11/26/13 17:13	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	154545	11/26/13 19:24	GTG	TAL BUF

Client Sample ID: WCSB-15 (0.5-1.5)

Lab Sample ID: 480-50847-16

Date Collected: 11/22/13 15:15

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			154449	11/26/13 10:30	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	154424	11/26/13 17:38	CDC	TAL BUF
Total/NA	Analysis	Moisture		1	154545	11/26/13 19:24	GTG	TAL BUF

Client Sample ID: WCSB-15 (2.5-3)

Lab Sample ID: 480-50847-17

Date Collected: 11/22/13 15:17

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 88.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111693	11/29/13 08:08	MPM	TAL CAN
Total/NA	Analysis	8082		10	112327	12/05/13 04:16	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSB-14 (7-8)

Lab Sample ID: 480-50847-19

Date Collected: 11/22/13 15:30

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 95.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			154449	11/26/13 10:30	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	154424	11/26/13 18:04	CDC	TAL BUF
Total/NA	Analysis	MA-EPH		1	154895	11/29/13 20:48	DGB	TAL BUF
Total/NA	Prep	3546			154450	11/26/13 10:37	CAM	TAL BUF
Total/NA	Fraction	MA EPH Frac			154639	11/27/13 08:07	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	155390	12/03/13 12:12	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	154545	11/26/13 19:24	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-13 (2.5-3)

Lab Sample ID: 480-50847-20

Date Collected: 11/22/13 15:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111693	11/29/13 08:08	MPM	TAL CAN
Total/NA	Analysis	8082		5	112327	12/05/13 04:30	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSB-12 (2.5-3)

Lab Sample ID: 480-50847-22

Date Collected: 11/22/13 16:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			154449	11/26/13 10:30	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	154424	11/26/13 18:29	CDC	TAL BUF
Total/NA	Prep	3540C			111693	11/29/13 08:08	MPM	TAL CAN
Total/NA	Analysis	8082		10000	112327	12/05/13 04:45	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSB-912 (2.5-3)

Lab Sample ID: 480-50847-24

Date Collected: 11/22/13 16:10

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 86.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111693	11/29/13 08:08	MPM	TAL CAN
Total/NA	Analysis	8082		10000	112327	12/05/13 05:00	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: WCSB-11 (6-7)

Lab Sample ID: 480-50847-25

Date Collected: 11/22/13 16:25

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 96.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			154829	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 16:08	JRK	TAL BUF
Total/NA	Prep	3050B			154525	11/27/13 15:15	NMD2	TAL BUF
Total/NA	Analysis	6010		1	155180	11/30/13 20:00	MTM2	TAL BUF
Total/NA	Prep	3050B			154525	11/27/13 15:15	NMD2	TAL BUF
Total/NA	Analysis	6010		5	155818	12/04/13 14:36	MTM2	TAL BUF

Client Sample ID: WCSB-7 (7-8)

Lab Sample ID: 480-50847-26

Date Collected: 11/22/13 16:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			111693	11/29/13 08:08	MPM	TAL CAN

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-1

Client Sample ID: WCSB-7 (7-8)

Lab Sample ID: 480-50847-26

Date Collected: 11/22/13 16:40

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	112327	12/05/13 05:15	LSH	TAL CAN
Total/NA	Prep	7471A			154829	11/29/13 08:40	JRK	TAL BUF
Total/NA	Analysis	7471A		1	155027	11/29/13 16:15	JRK	TAL BUF
Total/NA	Prep	3050B			154525	11/27/13 15:15	NMD2	TAL BUF
Total/NA	Analysis	6010		1	155180	11/30/13 20:16	MTM2	TAL BUF
Total/NA	Analysis	Moisture		1	111911	12/02/13 14:55	BLW	TAL CAN

Client Sample ID: TB-11222013 (2)

Lab Sample ID: 480-50847-27

Date Collected: 11/22/13 12:00

Matrix: Solid

Date Received: 11/26/13 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			154449	11/26/13 10:30	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	154424	11/26/13 18:55	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13 *
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13 *
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13 *
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13 *
Wisconsin	State Program	5	998310390	08-31-14

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13 *
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-14 *
Kentucky (UST)	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Laboratory: TestAmerica Canton (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14 *
West Virginia DEP	State Program	3	210	12-31-13 *
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL CAN
MA-EPH	Massachusetts - Extractable Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-50847-1	WCSB-20 (14-15)	Solid	11/22/13 12:15	11/26/13 02:00
480-50847-3	WCSB-4 (1-2)	Solid	11/22/13 13:05	11/26/13 02:00
480-50847-4	WCSB-4 (7-8)	Solid	11/22/13 13:10	11/26/13 02:00
480-50847-5	WCSB-22 (2.5-3)	Solid	11/22/13 13:30	11/26/13 02:00
480-50847-7	WCSB-21 (2.5-3)	Solid	11/22/13 13:55	11/26/13 02:00
480-50847-9	WCSB-19 (2.5-3)	Solid	11/22/13 14:10	11/26/13 02:00
480-50847-11	WCSB-18 (2.5-3)	Solid	11/22/13 14:20	11/26/13 02:00
480-50847-13	WCSB-17 (2.5-3)	Solid	11/22/13 14:35	11/26/13 02:00
480-50847-15	WCSB-16 (6-7)	Solid	11/22/13 14:55	11/26/13 02:00
480-50847-16	WCSB-15 (0.5-1.5)	Solid	11/22/13 15:15	11/26/13 02:00
480-50847-17	WCSB-15 (2.5-3)	Solid	11/22/13 15:17	11/26/13 02:00
480-50847-19	WCSB-14 (7-8)	Solid	11/22/13 15:30	11/26/13 02:00
480-50847-20	WCSB-13 (2.5-3)	Solid	11/22/13 15:40	11/26/13 02:00
480-50847-22	WCSB-12 (2.5-3)	Solid	11/22/13 16:10	11/26/13 02:00
480-50847-24	WCSB-912 (2.5-3)	Solid	11/22/13 16:10	11/26/13 02:00
480-50847-25	WCSB-11 (6-7)	Solid	11/22/13 16:25	11/26/13 02:00
480-50847-26	WCSB-7 (7-8)	Solid	11/22/13 16:40	11/26/13 02:00
480-50847-27	TB-11222013 (2)	Solid	11/22/13 12:00	11/26/13 02:00

Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-50847-1

Login Number: 50847

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client Woodard & Curran			Project Manager Jarrod Yoder			Date 11/22/13			Chain of Custody Number 255792		
Address 980 Washington Street			Telephone Number (Area Code)/Fax Number J.Yoder@woodardcurran.com, 978-557-8150			Lab Number			Page 1 of 3		
City Deerham	State MA	Zip Code 02026	Site Contact Ryan Smith			Lab Contact Becky Mason			Analysis (Attach list if more space is needed)		
Project Name and Location (State) Quincy-Intervale			Carrier/Waybill Number								
Contract/Purchase Order/Quote No.											

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives										Special Instructions/ Conditions of Receipt
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc	NaOH	NaOH	NaOH	NaOH	
WCSB-20 (14-15)	11/22/13	1215				X	2										
WCSB-20 (16-17)		1220				X	3										→ HOLD Analyses
WCSB-4 (1-2)		1305				X	1										
WCSB-4 (7-8)		1310				X	1										
WCSB-22 (2.5-3)		1330				X	2										
WCSB-22 (4.5-5)		1335				X	2										→ HOLD Analyses
WCSB-21 (2.5-3)		1355				X	2										
WCSB-21 (6-7)		1400				X	2										→ HOLD Analyses
WCSB-19 (2.5-3)		1410				X	2										
WCSB-19 (6-7)		1412				X	2										→ HOLD Analyses
WCSB-18 (2.5-3)		1420				X	1										
WCSB-18 (7-8)		1425				X	1										→ HOLD Analyses

Possible Hazard Identification			Sample Disposal			(A fee may be assessed if samples are retained longer than 1 month)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input checked="" type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months	
Turn Around Time Required			Standard WAC			QC Requirements (Specify)		
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input type="checkbox"/> Other MSA TAT	CAM methods required; GISKey & Excel file with PDF report		
1. Relinquished By TAL			Date 11/25/13 Time 12:45			1. Received By TAL Date 11/25/13 Time 12:45		
2. Relinquished By TAL			Date 11/25/13 Time 16:30			2. Received By TAL Date 11/26/13 Time 02:00		
3. Relinquished By			Date			3. Received By 2.4, 2.7, 3.3 #1 Date		

Comments: **Analyses on HOLD May be needed pending analytical results. Contact Project manager with preliminary data for HOLD Analysis determination**

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client Woodard & Curran			Project Manager Jarrod Yoder			Date 11/22/13			Chain of Custody Number 255793		
Address 980 Washington Street			Telephone Number (Area Code)/Fax Number yyoder@woodardcurran.com, 978-557-8150			Lab Number			Page 2 of 3		
City Dedham	State MA	Zip Code 02026	Site Contact Ryan Smith			Lab Contact Becky Mason			Analysis (Attach list if more space is needed)		
Project Name and Location (State) Quincy - Intercalc			Carrier/Waybill Number								
Contract/Purchase Order/Quote No.											

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives											
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	NaOH	NaOH	NaOH	NaOH	NaOH		
WCSB-17 (2.5-3)	11/22/13	1435				X	2											X	
WCSB-17 (4-5)		1440				X	1											X	
WCSB-16 (6-7)		1455				X	1					3						X	
WCSB-15 (0.5-1.5)		1515				X	1					3						X	
WCSB-15 (2.5-3)		1517				X	1											X	
WCSB-15 (6-7)		1520				X	1											X	
WCSB-14 (7-8)		1530				X	2					3						X	
WCSB-13 (2.5-3)		1540				X	1											X	
WCSB-13 (7-8)		1545				X	1											X	
WCSB-12 (2.5-3)		1610				X	2					3						X	
WCSB-12 (5.5-6)		1612				X	1											X	
WCSB-912 (2.5-3)		1610				X	1											X	

Special Instructions/
Conditions of Receipt
**NOTE: DI preserved VOC vial
Frozen at 6000 on 11/21/13**

Possible Hazard Identification			Sample Disposal			(A fee may be assessed if samples are retained longer than 1 month)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input checked="" type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months	
Turn Around Time Required			Standard w/ HSA TAT			QC Requirements (Specify)		
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input checked="" type="checkbox"/> Other	CAM methods required; GISKey & Excel file with PDF Report to MCP S-1 Standards		
1. Relinquished By TAL			Date 11/25/13 Time 1245			1. Received By M.C. Date 11/25/13 Time 12:45		
2. Relinquished By TAL			Date 11/25/13 Time 1639			2. Received By TAL Date 11-26-13 Time 0200		
3. Relinquished By			Date			3. Received By 2.4, 2.7, 3.3 #1 Date		

Comments: **Analyses on HOLD may be needed pending analytical results. Contact Project Manager with preliminary data for HOLD analyses determination.**

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-50847-2

Client Project/Site: Quincy Inervale

For:

Woodard & Curran Inc

40 Shattuck Road

Suite 110

Andover, Massachusetts 01810

Attn: Mr. Jarrod Yoder



Authorized for release by:

12/16/2013 11:02:03 AM

Becky Mason, Project Manager II

(413)572-4000

becky.mason@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Job ID: 480-50847-2

Laboratory: TestAmerica Buffalo

Narrative

Receipt

The samples were received on 11/26/2013 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.4° C, 2.7° C and 3.3° C.

The following samples were preserved by the client via freezing on 11/22/2013 at 20:00: TB-11222013 (2) (480-50847-27), WCSB-12 (2.5-3) (480-50847-22), WCSB-14 (7-8) (480-50847-19), WCSB-15 (0.5-1.5) (480-50847-16), WCSB-16 (6-7) (480-50847-15), WCSB-20 (16-17) (480-50847-2) . This is within the 48 hour timeframe required by the method.

Samples taken off hold per client request.

GC Semi VOA

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: WCSB-11 (6-7) (480-50847-25), WCSB-18 (7-8) (480-50847-12), WCSB-22 (4.5-5) (480-50847-6), WCSB-12 (5.5-6) (480-50847-23), WCSB-20 (16-17) (480-50847-2). Lot # S65830

Method 8082: The following sample was diluted due to the nature of the sample matrix: WCSB-20 (16-17) (480-50847-2). Elevated reporting limits (RLs) are provided.

Method MA-EPH: The method blank for batch 156219 contained analytes above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

MassDEP Analytical Protocol Certification Form					
Laboratory Name: TestAmerica Buffalo		Project #: 480-50847-2			
Project Location: Quincy Inervale		RTN:			
This form provides certifications for the data set for the following Laboratory Sample ID Number(s): 480-50847-2[2,6,8,10,12,14,18,21,23,25]					
Matrices: <input type="checkbox"/> Groundwater/Surface Water <input checked="" type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
CAM Protocols (check all that apply below):					
8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	Mass DEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input type="checkbox"/>	Mass DEP EPH CAM IV B <input checked="" type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input checked="" type="checkbox"/>	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Responses to Questions G, H and I below are required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
¹ All negative responses must be addressed in an attached laboratory narrative.					
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.					
Signature:		Position: <u>Project Manager</u>			
Printed Name: <u>Becky Mason</u>		Date: <u>12/16/13 10:58</u>			
This form has been electronically signed and approved					

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Client Sample ID: WCSB-20 (16-17)

Lab Sample ID: 480-50847-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1260	0.321	J	0.357	0.184	mg/Kg	5		✱	8082	Total/NA
Anthracene	0.226	J	1.05	0.200	mg/Kg	1		✱	MA-EPH	Total/NA
2-Methylnaphthalene	0.271	J	1.05	0.206	mg/Kg	1		✱	MA-EPH	Total/NA
Fluoranthene	0.331	J	1.05	0.185	mg/Kg	1		✱	MA-EPH	Total/NA
Naphthalene	0.691	J	1.05	0.177	mg/Kg	1		✱	MA-EPH	Total/NA
Phenanthrene	0.652	J B	1.05	0.211	mg/Kg	1		✱	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	18.8	B	10.5	4.21	mg/Kg	1		✱	MA-EPH	Total/NA
C19-C36 Aliphatics	19.2		10.5	4.21	mg/Kg	1		✱	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	16.6		10.8	10.8	mg/Kg	1		✱	MA-EPH	Total/NA

Client Sample ID: WCSB-22 (4.5-5)

Lab Sample ID: 480-50847-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1260	0.126		0.0417	0.0215	mg/Kg	1		✱	8082	Total/NA

Client Sample ID: WCSB-18 (7-8)

Lab Sample ID: 480-50847-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1260	0.0467		0.0401	0.0207	mg/Kg	1		✱	8082	Total/NA

Client Sample ID: WCSB-12 (5.5-6)

Lab Sample ID: 480-50847-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
PCB-1242	0.601		0.222	0.0873	mg/Kg	5		✱	8082	Total/NA
PCB-1254	0.968		0.222	0.114	mg/Kg	5		✱	8082	Total/NA

Client Sample ID: WCSB-11 (6-7)

Lab Sample ID: 480-50847-25

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Client Sample ID: WCSB-20 (16-17)

Lab Sample ID: 480-50847-2

Date Collected: 11/22/13 12:20

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 46.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.357		0.357	0.227	mg/Kg	☼	12/09/13 09:03	12/12/13 07:20	5
PCB-1221	<0.357		0.357	0.173	mg/Kg	☼	12/09/13 09:03	12/12/13 07:20	5
PCB-1232	<0.357		0.357	0.151	mg/Kg	☼	12/09/13 09:03	12/12/13 07:20	5
PCB-1242	<0.357		0.357	0.141	mg/Kg	☼	12/09/13 09:03	12/12/13 07:20	5
PCB-1248	<0.357		0.357	0.184	mg/Kg	☼	12/09/13 09:03	12/12/13 07:20	5
PCB-1254	<0.357		0.357	0.184	mg/Kg	☼	12/09/13 09:03	12/12/13 07:20	5
PCB-1260	0.321	J	0.357	0.184	mg/Kg	☼	12/09/13 09:03	12/12/13 07:20	5
PCB-1262	<0.357		0.357	0.292	mg/Kg	☼	12/09/13 09:03	12/12/13 07:20	5
PCB-1268	<0.357		0.357	0.151	mg/Kg	☼	12/09/13 09:03	12/12/13 07:20	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	162	X	30 - 150	12/09/13 09:03	12/12/13 07:20	5
Tetrachloro-m-xylene	98		30 - 150	12/09/13 09:03	12/12/13 07:20	5
DCB Decachlorobiphenyl	85		30 - 150	12/09/13 09:03	12/12/13 07:20	5
DCB Decachlorobiphenyl	82		30 - 150	12/09/13 09:03	12/12/13 07:20	5

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<1.05		1.05	0.171	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Acenaphthylene	<1.05		1.05	0.190	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Anthracene	0.226	J	1.05	0.200	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Benzo[a]anthracene	<1.05		1.05	0.160	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Benzo[a]pyrene	<1.05		1.05	0.152	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Benzo[b]fluoranthene	<1.05		1.05	0.150	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Benzo[g,h,i]perylene	<1.05		1.05	0.179	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Benzo[k]fluoranthene	<1.05		1.05	0.154	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
2-Methylnaphthalene	0.271	J	1.05	0.206	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Chrysene	<1.05		1.05	0.187	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Dibenz(a,h)anthracene	<1.05		1.05	0.147	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Fluoranthene	0.331	J	1.05	0.185	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Fluorene	<1.05		1.05	0.211	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Indeno[1,2,3-cd]pyrene	<1.05		1.05	0.154	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Naphthalene	0.691	J	1.05	0.177	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Phenanthrene	0.652	J B	1.05	0.211	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
Pyrene	<1.05		1.05	0.192	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
C11-C22 Aromatics (unadjusted)	18.8	B	10.5	4.21	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
C19-C36 Aliphatics	19.2		10.5	4.21	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1
C9-C18 Aliphatics	<10.5		10.5	4.21	mg/Kg	☼	12/06/13 16:48	12/12/13 13:35	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	16.6		10.8	10.8	mg/Kg	☼		12/13/13 09:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	49		40 - 140	12/06/13 16:48	12/12/13 13:35	1
2-Bromonaphthalene	84		40 - 140	12/06/13 16:48	12/12/13 13:35	1
2-Fluorobiphenyl	97		40 - 140	12/06/13 16:48	12/12/13 13:35	1
o-Terphenyl	50		40 - 140	12/06/13 16:48	12/12/13 13:35	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-2

Client Sample ID: WCSB-22 (4.5-5)

Lab Sample ID: 480-50847-6

Date Collected: 11/22/13 13:35

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 79.2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0417		0.0417	0.0266	mg/Kg	☼	12/09/13 09:03	12/11/13 16:46	1
PCB-1221	<0.0417		0.0417	0.0202	mg/Kg	☼	12/09/13 09:03	12/11/13 16:46	1
PCB-1232	<0.0417		0.0417	0.0177	mg/Kg	☼	12/09/13 09:03	12/11/13 16:46	1
PCB-1242	<0.0417		0.0417	0.0164	mg/Kg	☼	12/09/13 09:03	12/11/13 16:46	1
PCB-1248	<0.0417		0.0417	0.0215	mg/Kg	☼	12/09/13 09:03	12/11/13 16:46	1
PCB-1254	<0.0417		0.0417	0.0215	mg/Kg	☼	12/09/13 09:03	12/11/13 16:46	1
PCB-1260	0.126		0.0417	0.0215	mg/Kg	☼	12/09/13 09:03	12/11/13 16:46	1
PCB-1262	<0.0417		0.0417	0.0342	mg/Kg	☼	12/09/13 09:03	12/11/13 16:46	1
PCB-1268	<0.0417		0.0417	0.0177	mg/Kg	☼	12/09/13 09:03	12/11/13 16:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	57		30 - 150				12/09/13 09:03	12/11/13 16:46	1
Tetrachloro-m-xylene	87		30 - 150				12/09/13 09:03	12/11/13 16:46	1
DCB Decachlorobiphenyl	53		30 - 150				12/09/13 09:03	12/11/13 16:46	1
DCB Decachlorobiphenyl	124		30 - 150				12/09/13 09:03	12/11/13 16:46	1

Client Sample ID: WCSB-18 (7-8)

Lab Sample ID: 480-50847-12

Date Collected: 11/22/13 14:25

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 81.8

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0401		0.0401	0.0255	mg/Kg	☼	12/09/13 09:03	12/11/13 17:01	1
PCB-1221	<0.0401		0.0401	0.0195	mg/Kg	☼	12/09/13 09:03	12/11/13 17:01	1
PCB-1232	<0.0401		0.0401	0.0170	mg/Kg	☼	12/09/13 09:03	12/11/13 17:01	1
PCB-1242	<0.0401		0.0401	0.0158	mg/Kg	☼	12/09/13 09:03	12/11/13 17:01	1
PCB-1248	<0.0401		0.0401	0.0207	mg/Kg	☼	12/09/13 09:03	12/11/13 17:01	1
PCB-1254	<0.0401		0.0401	0.0207	mg/Kg	☼	12/09/13 09:03	12/11/13 17:01	1
PCB-1260	0.0467		0.0401	0.0207	mg/Kg	☼	12/09/13 09:03	12/11/13 17:01	1
PCB-1262	<0.0401		0.0401	0.0328	mg/Kg	☼	12/09/13 09:03	12/11/13 17:01	1
PCB-1268	<0.0401		0.0401	0.0170	mg/Kg	☼	12/09/13 09:03	12/11/13 17:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	77		30 - 150				12/09/13 09:03	12/11/13 17:01	1
Tetrachloro-m-xylene	70		30 - 150				12/09/13 09:03	12/11/13 17:01	1
DCB Decachlorobiphenyl	48		30 - 150				12/09/13 09:03	12/11/13 17:01	1
DCB Decachlorobiphenyl	63		30 - 150				12/09/13 09:03	12/11/13 17:01	1

Client Sample ID: WCSB-12 (5.5-6)

Lab Sample ID: 480-50847-23

Date Collected: 11/22/13 16:12

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 74.5

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.222		0.222	0.141	mg/Kg	☼	12/09/13 09:03	12/12/13 07:35	5
PCB-1221	<0.222		0.222	0.107	mg/Kg	☼	12/09/13 09:03	12/12/13 07:35	5
PCB-1232	<0.222		0.222	0.0940	mg/Kg	☼	12/09/13 09:03	12/12/13 07:35	5
PCB-1242	0.601		0.222	0.0873	mg/Kg	☼	12/09/13 09:03	12/12/13 07:35	5
PCB-1248	<0.222		0.222	0.114	mg/Kg	☼	12/09/13 09:03	12/12/13 07:35	5
PCB-1254	0.968		0.222	0.114	mg/Kg	☼	12/09/13 09:03	12/12/13 07:35	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Client Sample ID: WCSB-12 (5.5-6)

Lab Sample ID: 480-50847-23

Date Collected: 11/22/13 16:12

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 74.5

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	<0.222		0.222	0.114	mg/Kg	☼	12/09/13 09:03	12/12/13 07:35	5
PCB-1262	<0.222		0.222	0.181	mg/Kg	☼	12/09/13 09:03	12/12/13 07:35	5
PCB-1268	<0.222		0.222	0.0940	mg/Kg	☼	12/09/13 09:03	12/12/13 07:35	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		30 - 150	12/09/13 09:03	12/12/13 07:35	5
Tetrachloro-m-xylene	90		30 - 150	12/09/13 09:03	12/12/13 07:35	5
DCB Decachlorobiphenyl	120		30 - 150	12/09/13 09:03	12/12/13 07:35	5
DCB Decachlorobiphenyl	128		30 - 150	12/09/13 09:03	12/12/13 07:35	5

Client Sample ID: WCSB-11 (6-7)

Lab Sample ID: 480-50847-25

Date Collected: 11/22/13 16:25

Matrix: Solid

Date Received: 11/26/13 02:00

Percent Solids: 96.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0341		0.0341	0.0217	mg/Kg	☼	12/09/13 09:03	12/11/13 17:31	1
PCB-1221	<0.0341		0.0341	0.0165	mg/Kg	☼	12/09/13 09:03	12/11/13 17:31	1
PCB-1232	<0.0341		0.0341	0.0145	mg/Kg	☼	12/09/13 09:03	12/11/13 17:31	1
PCB-1242	<0.0341		0.0341	0.0134	mg/Kg	☼	12/09/13 09:03	12/11/13 17:31	1
PCB-1248	<0.0341		0.0341	0.0176	mg/Kg	☼	12/09/13 09:03	12/11/13 17:31	1
PCB-1254	<0.0341		0.0341	0.0176	mg/Kg	☼	12/09/13 09:03	12/11/13 17:31	1
PCB-1260	<0.0341		0.0341	0.0176	mg/Kg	☼	12/09/13 09:03	12/11/13 17:31	1
PCB-1262	<0.0341		0.0341	0.0279	mg/Kg	☼	12/09/13 09:03	12/11/13 17:31	1
PCB-1268	<0.0341		0.0341	0.0145	mg/Kg	☼	12/09/13 09:03	12/11/13 17:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	46		30 - 150	12/09/13 09:03	12/11/13 17:31	1
Tetrachloro-m-xylene	50		30 - 150	12/09/13 09:03	12/11/13 17:31	1
DCB Decachlorobiphenyl	46		30 - 150	12/09/13 09:03	12/11/13 17:31	1
DCB Decachlorobiphenyl	47		30 - 150	12/09/13 09:03	12/11/13 17:31	1

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (30-150)	TCX2 (30-150)	DCB1 (30-150)	DCB2 (30-150)
480-50847-2	WCSB-20 (16-17)	162 X	98	85	82
480-50847-6	WCSB-22 (4.5-5)	57	87	53	124
480-50847-12	WCSB-18 (7-8)	77	70	48	63
480-50847-23	WCSB-12 (5.5-6)	91	90	120	128
480-50847-25	WCSB-11 (6-7)	46	50	46	47
LCS 240-112814/24-A	Lab Control Sample	80	85	61	74
LCSD 240-112814/25-A	Lab Control Sample Dup	79	107	69	74
MB 240-112814/23-A	Method Blank	81	91	65	75

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		1COD2 (40-140)	2BN1 (40-140)	FBP1 (40-140)	OTPH1 (40-140)
480-50847-2	WCSB-20 (16-17)	49	84	97	50
LCS 480-156219/2-B	Lab Control Sample	66	86	99	60
LCSD 480-156219/17-B	Lab Control Sample Dup	65	83	96	61
MB 480-156219/1-B	Method Blank	63	85	99	61

Surrogate Legend

1COD = 1-Chlorooctadecane
2BN = 2-Bromonaphthalene
FBP = 2-Fluorobiphenyl
OTPH = o-Terphenyl

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Lab Sample ID: MB 240-112814/23-A

Matrix: Solid

Analysis Batch: 113249

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 112814

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0330		0.0330	0.0210	mg/Kg		12/09/13 09:03	12/11/13 17:45	1
PCB-1221	<0.0330		0.0330	0.0160	mg/Kg		12/09/13 09:03	12/11/13 17:45	1
PCB-1232	<0.0330		0.0330	0.0140	mg/Kg		12/09/13 09:03	12/11/13 17:45	1
PCB-1242	<0.0330		0.0330	0.0130	mg/Kg		12/09/13 09:03	12/11/13 17:45	1
PCB-1248	<0.0330		0.0330	0.0170	mg/Kg		12/09/13 09:03	12/11/13 17:45	1
PCB-1254	<0.0330		0.0330	0.0170	mg/Kg		12/09/13 09:03	12/11/13 17:45	1
PCB-1260	<0.0330		0.0330	0.0170	mg/Kg		12/09/13 09:03	12/11/13 17:45	1
PCB-1262	<0.0330		0.0330	0.0270	mg/Kg		12/09/13 09:03	12/11/13 17:45	1
PCB-1268	<0.0330		0.0330	0.0140	mg/Kg		12/09/13 09:03	12/11/13 17:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		30 - 150	12/09/13 09:03	12/11/13 17:45	1
Tetrachloro-m-xylene	91		30 - 150	12/09/13 09:03	12/11/13 17:45	1
DCB Decachlorobiphenyl	65		30 - 150	12/09/13 09:03	12/11/13 17:45	1
DCB Decachlorobiphenyl	75		30 - 150	12/09/13 09:03	12/11/13 17:45	1

Lab Sample ID: LCS 240-112814/24-A

Matrix: Solid

Analysis Batch: 113249

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 112814

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.333	0.2801		mg/Kg		84	40 - 140
PCB-1260	0.333	0.2815		mg/Kg		84	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	80		30 - 150
Tetrachloro-m-xylene	85		30 - 150
DCB Decachlorobiphenyl	61		30 - 150
DCB Decachlorobiphenyl	74		30 - 150

Lab Sample ID: LCSD 240-112814/25-A

Matrix: Solid

Analysis Batch: 113249

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 112814

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.333	0.2689		mg/Kg		81	40 - 140	4	30
PCB-1260	0.333	0.2783		mg/Kg		83	40 - 140	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	79		30 - 150
Tetrachloro-m-xylene	107		30 - 150
DCB Decachlorobiphenyl	69		30 - 150
DCB Decachlorobiphenyl	74		30 - 150

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-2

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 480-156219/1-B

Matrix: Solid

Analysis Batch: 156916

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 156219

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.492		0.492	0.0796	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Acenaphthylene	<0.492		0.492	0.0885	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Anthracene	<0.492		0.492	0.0934	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Benzo[a]anthracene	<0.492		0.492	0.0747	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Benzo[a]pyrene	<0.492		0.492	0.0708	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Benzo[b]fluoranthene	<0.492		0.492	0.0698	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Benzo[g,h,i]perylene	0.1329	J	0.492	0.0836	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Benzo[k]fluoranthene	<0.492		0.492	0.0718	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
2-Methylnaphthalene	<0.492		0.492	0.0964	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Chrysene	<0.492		0.492	0.0875	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Dibenz(a,h)anthracene	<0.492		0.492	0.0688	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Fluoranthene	<0.492		0.492	0.0865	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Fluorene	<0.492		0.492	0.0983	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Indeno[1,2,3-cd]pyrene	0.07908	J	0.492	0.0718	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Naphthalene	<0.492		0.492	0.0826	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Phenanthrene	0.1557	J	0.492	0.0983	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
Pyrene	<0.492		0.492	0.0895	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
C11-C22 Aromatics (unadjusted)	3.729	J	4.92	1.97	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
C19-C36 Aliphatics	<4.92		4.92	1.97	mg/Kg		12/06/13 15:02	12/11/13 14:28	1
C9-C18 Aliphatics	<4.92		4.92	1.97	mg/Kg		12/06/13 15:02	12/11/13 14:28	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	63		40 - 140	12/06/13 15:02	12/11/13 14:28	1
2-Bromonaphthalene	85		40 - 140	12/06/13 15:02	12/11/13 14:28	1
2-Fluorobiphenyl	99		40 - 140	12/06/13 15:02	12/11/13 14:28	1
o-Terphenyl	61		40 - 140	12/06/13 15:02	12/11/13 14:28	1

Lab Sample ID: LCS 480-156219/2-B

Matrix: Solid

Analysis Batch: 156916

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 156219

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	4.88	2.743		mg/Kg		56	40 - 140
Acenaphthylene	4.88	2.791		mg/Kg		57	40 - 140
Anthracene	4.88	3.315		mg/Kg		68	40 - 140
Benzo[a]anthracene	4.88	3.372		mg/Kg		69	40 - 140
Benzo[a]pyrene	4.88	3.260		mg/Kg		67	40 - 140
Benzo[b]fluoranthene	4.88	3.228		mg/Kg		66	40 - 140
Benzo[g,h,i]perylene	4.88	2.683		mg/Kg		55	40 - 140
Benzo[k]fluoranthene	4.88	3.338		mg/Kg		68	40 - 140
2-Methylnaphthalene	4.88	2.609		mg/Kg		53	40 - 140
Chrysene	4.88	3.380		mg/Kg		69	40 - 140
Dibenz(a,h)anthracene	4.88	3.027		mg/Kg		62	40 - 140
Fluoranthene	4.88	3.307		mg/Kg		68	40 - 140
Fluorene	4.88	3.016		mg/Kg		62	40 - 140
Indeno[1,2,3-cd]pyrene	4.88	2.839		mg/Kg		58	40 - 140
Naphthalene	4.88	2.374		mg/Kg		49	40 - 140
Phenanthrene	4.88	3.286		mg/Kg		67	40 - 140

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-50847-2

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCS 480-156219/2-B

Matrix: Solid

Analysis Batch: 156916

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 156219

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pyrene	4.88	3.383		mg/Kg		69	40 - 140
C11-C22 Aromatics (unadjusted)	82.9	54.12		mg/Kg		65	40 - 140
C19-C36 Aliphatics	39.0	26.18		mg/Kg		67	40 - 140
C9-C18 Aliphatics	29.3	14.98		mg/Kg		51	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	66		40 - 140
2-Bromonaphthalene	86		40 - 140
2-Fluorobiphenyl	99		40 - 140
o-Terphenyl	60		40 - 140

Lab Sample ID: LCSD 480-156219/17-B

Matrix: Solid

Analysis Batch: 156916

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 156219

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	4.73	2.781		mg/Kg		59	40 - 140	1	25
Acenaphthylene	4.73	2.798		mg/Kg		59	40 - 140	0	25
Anthracene	4.73	3.340		mg/Kg		71	40 - 140	1	25
Benzo[a]anthracene	4.73	3.352		mg/Kg		71	40 - 140	1	25
Benzo[a]pyrene	4.73	3.276		mg/Kg		69	40 - 140	0	25
Benzo[b]fluoranthene	4.73	3.228		mg/Kg		68	40 - 140	0	25
Benzo[g,h,i]perylene	4.73	3.002		mg/Kg		63	40 - 140	11	25
Benzo[k]fluoranthene	4.73	3.321		mg/Kg		70	40 - 140	1	25
2-Methylnaphthalene	4.73	2.676		mg/Kg		57	40 - 140	3	25
Chrysene	4.73	3.353		mg/Kg		71	40 - 140	1	25
Dibenz(a,h)anthracene	4.73	3.182		mg/Kg		67	40 - 140	5	25
Fluoranthene	4.73	3.293		mg/Kg		70	40 - 140	0	25
Fluorene	4.73	3.009		mg/Kg		64	40 - 140	0	25
Indeno[1,2,3-cd]pyrene	4.73	3.048		mg/Kg		64	40 - 140	7	25
Naphthalene	4.73	2.398		mg/Kg		51	40 - 140	1	25
Phenanthrene	4.73	3.312		mg/Kg		70	40 - 140	1	25
Pyrene	4.73	3.374		mg/Kg		71	40 - 140	0	25
C11-C22 Aromatics (unadjusted)	80.5	55.04		mg/Kg		68	40 - 140	2	25
C19-C36 Aliphatics	37.9	25.83		mg/Kg		68	40 - 140	1	25
C9-C18 Aliphatics	28.4	15.21		mg/Kg		54	40 - 140	2	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctadecane	65		40 - 140
2-Bromonaphthalene	83		40 - 140
2-Fluorobiphenyl	96		40 - 140
o-Terphenyl	61		40 - 140

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

GC Semi VOA

Prep Batch: 112814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-2	WCSB-20 (16-17)	Total/NA	Solid	3540C	
480-50847-6	WCSB-22 (4.5-5)	Total/NA	Solid	3540C	
480-50847-12	WCSB-18 (7-8)	Total/NA	Solid	3540C	
480-50847-23	WCSB-12 (5.5-6)	Total/NA	Solid	3540C	
480-50847-25	WCSB-11 (6-7)	Total/NA	Solid	3540C	
LCS 240-112814/24-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-112814/25-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-112814/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 113249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-6	WCSB-22 (4.5-5)	Total/NA	Solid	8082	112814
480-50847-12	WCSB-18 (7-8)	Total/NA	Solid	8082	112814
480-50847-25	WCSB-11 (6-7)	Total/NA	Solid	8082	112814
LCS 240-112814/24-A	Lab Control Sample	Total/NA	Solid	8082	112814
LCSD 240-112814/25-A	Lab Control Sample Dup	Total/NA	Solid	8082	112814
MB 240-112814/23-A	Method Blank	Total/NA	Solid	8082	112814

Analysis Batch: 113290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-2	WCSB-20 (16-17)	Total/NA	Solid	8082	112814
480-50847-23	WCSB-12 (5.5-6)	Total/NA	Solid	8082	112814

Prep Batch: 156219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-2	WCSB-20 (16-17)	Total/NA	Solid	3546	
LCS 480-156219/2-B	Lab Control Sample	Total/NA	Solid	3546	
LCSD 480-156219/17-B	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 480-156219/1-B	Method Blank	Total/NA	Solid	3546	

Fraction Batch: 156814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-2	WCSB-20 (16-17)	Total/NA	Solid	MA EPH Frac	156219
LCS 480-156219/2-B	Lab Control Sample	Total/NA	Solid	MA EPH Frac	156219
LCSD 480-156219/17-B	Lab Control Sample Dup	Total/NA	Solid	MA EPH Frac	156219
MB 480-156219/1-B	Method Blank	Total/NA	Solid	MA EPH Frac	156219

Analysis Batch: 156916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-156219/2-B	Lab Control Sample	Total/NA	Solid	MA-EPH	156814
LCSD 480-156219/17-B	Lab Control Sample Dup	Total/NA	Solid	MA-EPH	156814
MB 480-156219/1-B	Method Blank	Total/NA	Solid	MA-EPH	156814

Analysis Batch: 157162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-2	WCSB-20 (16-17)	Total/NA	Solid	MA-EPH	

Analysis Batch: 157185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-2	WCSB-20 (16-17)	Total/NA	Solid	MA-EPH	156814

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

General Chemistry

Analysis Batch: 113345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-50847-2	WCSB-20 (16-17)	Total/NA	Solid	Moisture	
480-50847-6	WCSB-22 (4.5-5)	Total/NA	Solid	Moisture	
480-50847-12	WCSB-18 (7-8)	Total/NA	Solid	Moisture	
480-50847-23	WCSB-12 (5.5-6)	Total/NA	Solid	Moisture	
480-50847-25	WCSB-11 (6-7)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Client Sample ID: WCSB-20 (16-17)

Date Collected: 11/22/13 12:20

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-2

Matrix: Solid

Percent Solids: 46.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			112814	12/09/13 09:03	CSC	TAL CAN
Total/NA	Analysis	8082		5	113290	12/12/13 07:20	LSH	TAL CAN
Total/NA	Analysis	MA-EPH		1	157162	12/13/13 09:40	DGB	TAL BUF
Total/NA	Prep	3546			156219	12/06/13 16:48	JRL	TAL BUF
Total/NA	Fraction	MA EPH Frac			156814	12/10/13 14:41	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	157185	12/12/13 13:35	DGB	TAL BUF
Total/NA	Analysis	Moisture		1	113345	12/12/13 15:25	WAL	TAL CAN

Client Sample ID: WCSB-22 (4.5-5)

Date Collected: 11/22/13 13:35

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-6

Matrix: Solid

Percent Solids: 79.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			112814	12/09/13 09:03	CSC	TAL CAN
Total/NA	Analysis	8082		1	113249	12/11/13 16:46	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	113345	12/12/13 15:25	WAL	TAL CAN

Client Sample ID: WCSB-18 (7-8)

Date Collected: 11/22/13 14:25

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-12

Matrix: Solid

Percent Solids: 81.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	113249	12/11/13 17:01	LSH	TAL CAN
Total/NA	Prep	3540C			112814	12/09/13 09:03	CSC	TAL CAN
Total/NA	Analysis	Moisture		1	113345	12/12/13 17:31	WAL	TAL CAN

Client Sample ID: WCSB-12 (5.5-6)

Date Collected: 11/22/13 16:12

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-23

Matrix: Solid

Percent Solids: 74.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			112814	12/09/13 09:03	CSC	TAL CAN
Total/NA	Analysis	8082		5	113290	12/12/13 07:35	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	113345	12/12/13 17:31	WAL	TAL CAN

Client Sample ID: WCSB-11 (6-7)

Date Collected: 11/22/13 16:25

Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-25

Matrix: Solid

Percent Solids: 96.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			112814	12/09/13 09:03	CSC	TAL CAN
Total/NA	Analysis	8082		1	113249	12/11/13 17:31	LSH	TAL CAN

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Client Sample ID: WCSB-11 (6-7)
Date Collected: 11/22/13 16:25
Date Received: 11/26/13 02:00

Lab Sample ID: 480-50847-25
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	113345	12/12/13 17:31	WAL	TAL CAN

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13 *
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13 *
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13 *
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13 *
Wisconsin	State Program	5	998310390	08-31-14

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13 *
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-14 *
Kentucky (UST)	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Laboratory: TestAmerica Canton (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14 *
West Virginia DEP	State Program	3	210	12-31-13 *
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL CAN
MA-EPH	Massachusetts - Extractable Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-50847-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-50847-2	WCSB-20 (16-17)	Solid	11/22/13 12:20	11/26/13 02:00
480-50847-6	WCSB-22 (4.5-5)	Solid	11/22/13 13:35	11/26/13 02:00
480-50847-12	WCSB-18 (7-8)	Solid	11/22/13 14:25	11/26/13 02:00
480-50847-23	WCSB-12 (5.5-6)	Solid	11/22/13 16:12	11/26/13 02:00
480-50847-25	WCSB-11 (6-7)	Solid	11/22/13 16:25	11/26/13 02:00

Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-50847-2

Login Number: 50847

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client Woodland & Curran			Project Manager Jarrod Yoder			Date 11/22/13		Chain of Custody Number 255792	
Address 980 Washington Street			Telephone Number (Area Code)/Fax Number J.Yoder@woodlandcurran.com, 978-557-8150			Lab Number		Page 1 of 3	
City Deerham	State MA	Zip Code 02026	Site Contact Ryan Smith		Lab Contact Becky Mason		Analysis (Attach list if more space is needed)		
Project Name and Location (State) Quincy-Intervale			Carrier/Waybill Number						Special Instructions/ Conditions of Receipt
Contract/Purchase Order/Quote No.									

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives										Analysis	Special Instructions/ Conditions of Receipt
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc	NaOH	NaOH	NaOH	NaOH		
WCSB-20 (14-15)	11/22/13	1215				X	2										X	
WCSB-20 (16-17)		1220				X	3										X	HOLD Analyses
WCSB-4 (1-2)		1305				X	1										X	
WCSB-4 (7-8)		1310				X	1										X	
WCSB-22 (2.5-3)		1330				X	2										X	
WCSB-22 (4.5-5)		1335				X	2										X	HOLD Analyses
WCSB-21 (2.5-3)		1355				X	2										X	
WCSB-21 (6-7)		1400				X	2										X	HOLD Analyses
WCSB-19 (2.5-3)		1410				X	2										X	
WCSB-19 (6-7)		1412				X	2										X	HOLD Analyses
WCSB-18 (2.5-3)		1420				X	1										X	
WCSB-18 (7-8)		1425				X	1										X	HOLD Analyses

Possible Hazard Identification			Sample Disposal			(A fee may be assessed if samples are retained longer than 1 month)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input checked="" type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months	
Turn Around Time Required			Standard WAC			QC Requirements (Specify)		
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Report to MCP 5-1 Standards <input checked="" type="checkbox"/> CAT methods required; GIS Key & Excel file with PDF report		
1. Relinquished By TAL			Date 11/25/13 Time 12:45			1. Received By TAL Date 11/25/13 Time 12:45		
2. Relinquished By TAL			Date 11/25/13 Time 16:30			2. Received By TAL Date 11/26/13 Time 02:00		
3. Relinquished By			Date			3. Received By 2.4, 2.7, 3.3 #1 Date		
Comments: Analyses on HOLD May be needed pending analytical results. Contact Project Manager with preliminary data for HOLD Analysis determination								

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client Woodland & Curran			Project Manager Jarrod Yoder			Date 11/22/13		Chain of Custody Number 255793	
Address 980 Washington Street			Telephone Number (Area Code)/Fax Number Yoder@woodlandcurran.com, 978-557-8150			Lab Number		Page 2 of 3	
City Dedham	State MA	Zip Code 02026	Site Contact Ryan Smith		Lab Contact Becky Mason		Analysis (Attach list if more space is needed)		
Project Name and Location (State) Quincy - Intercalc			Carrier/Waybill Number						Special Instructions/ Conditions of Receipt NOTE: DI preserved VOC vial Frozen at 6000 on 11/21/13
Contract/Purchase Order/Quote No.									

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives											
			Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	NaOH	NaOH	NaOH	NaOH		
WCSB-17 (2.5-3)	11/22/13	1435				X		2										X	
WCSB-17 (4-5)		1440				X		1										X	
WCSB-16 (6-7)		1455				X		1						3			X		
WCSB-15 (0.5-1.5)		1515				X		1						3			X		
WCSB-15 (2.5-3)		1517				X		1									X		
WCSB-15 (6-7)		1520				X		1									X		
WCSB-14 (7-8)		1530				X		2						3			X	X	
WCSB-13 (2.5-3)		1540				X		1									X		
WCSB-13 (7-8)		1545				X		1									X		
WCSB-12 (2.5-3)		1610				X		2						3			X		
WCSB-12 (5.5-6)		1612				X		1									X		
WCSB-912 (2.5-3)		1610				X		1									X		

Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown			Sample Disposal <input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			(A fee may be assessed if samples are retained longer than 1 month)		
Turn Around Time Required <input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input checked="" type="checkbox"/> Other Standard w/ HSA TAT			QC Requirements (Specify) <input checked="" type="checkbox"/> CAM methods required; GISKey & Excel file with PDF Report to MCP S-1 Standards					
1. Relinquished By TAL			Date 11/25/13 Time 1245			1. Received By M.C.		
2. Relinquished By TAL			Date 11/25/13 Time 1639			2. Received By TAL		
3. Relinquished By			Date			3. Received By 2.4, 2.7, 3.3 #1		

Comments: **Analyses on HOLD may be needed pending analytical results. Contact Project Manager with preliminary data for HOLD analyses determination.**

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TAL-4124 (1007)

Client

Drinking Water? Yes ☐ No ☒

THE LEADER IN ENVIRONMENTAL TESTING

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-45074-1

Client Project/Site: Quincy Inervale

Revision: 1

For:


Woodard & Curran Inc

95 Cedar St

Suite 100

Providence, Rhode Island 02903

Attn: Ms. Andrea Hevey



Authorized for release by:

9/21/2013 3:47:10 PM

Becky Mason, Project Manager II

becky.mason@testamericainc.com

LINKS

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results through

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
E	Result exceeded calibration range.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Job ID: 480-45074-1

Laboratory: TestAmerica Buffalo

Narrative

Revised Report: Client wanted units for PCB changed to mg/Kg. This replaces final report from 912/13.

Receipt

The samples were received on 9/5/2013 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

GC Semi VOA

Due to high concentration of target compounds all samples were run at dilutions.

Per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits after moisture correction do not achieve the CAM reporting limits specified in this CAM protocol; however they do achieve method 1 S1 standards.

Due to dilutions required, per question G on the MassDEP Analytical Protocol Certification Form, the CAM reporting limits specified in this CAM protocol could not be achieved for some or all samples/analytes.

No analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

MassDEP Analytical Protocol Certification Form					
Laboratory Name: TestAmerica Buffalo		Project #: 480-45074-1			
Project Location: Quincy		RTN:			
This form provides certifications for the following data set: list Laboratory Sample ID Number(s): 480-45074-1					
Matrices: <input type="checkbox"/> Groundwater/Surface Water <input checked="" type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
CAM Protocols (check all that apply below):					
8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	Mass DEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	6010 Metals CAM III C <input type="checkbox"/>	Mass DEP EPH CAM IV B <input type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input checked="" type="checkbox"/>	9014 Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Responses to Questions G, H and I below are required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
¹ All negative responses must be addressed in an attached laboratory narrative.					
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.					
Signature:		Position: Project Manager			
Printed Name: Becky Mason		Date: 9/12/13 14:03			
This form has been electronically signed and approved					

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Client Sample ID: WCSS-02

Lab Sample ID: 480-45074-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	23.5		3.65	1.88	mg/Kg	100	☼	8082	Total/NA

Client Sample ID: WCSS-03

Lab Sample ID: 480-45074-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	1.53		0.439	0.226	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCSS-04

Lab Sample ID: 480-45074-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	18.9		3.68	1.89	mg/Kg	100	☼	8082	Total/NA

Client Sample ID: WCSS-05

Lab Sample ID: 480-45074-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	3.17		1.78	0.918	mg/Kg	50	☼	8082	Total/NA

Client Sample ID: WCSS-06

Lab Sample ID: 480-45074-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	2.18		0.358	0.184	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCSS-07

Lab Sample ID: 480-45074-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	1.93		0.361	0.186	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCSS-08

Lab Sample ID: 480-45074-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	1.57		0.393	0.203	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCSS-09

Lab Sample ID: 480-45074-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	21.0		4.10	2.11	mg/Kg	100	☼	8082	Total/NA

Client Sample ID: WCSS-10

Lab Sample ID: 480-45074-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	92.2		38.5	19.8	mg/Kg	1000	☼	8082	Total/NA

Client Sample ID: WCSS-902

Lab Sample ID: 480-45074-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	25.3		3.97	2.05	mg/Kg	100	☼	8082	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Client Sample ID: WCSS-02

Date Collected: 09/03/13 15:05

Date Received: 09/05/13 09:30

Lab Sample ID: 480-45074-1

Matrix: Solid

Percent Solids: 91.7

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<3.65		3.65	2.32	mg/Kg	☼	09/05/13 11:42	09/09/13 15:43	100
PCB-1221	<3.65		3.65	1.77	mg/Kg	☼	09/05/13 11:42	09/09/13 15:43	100
PCB-1232	<3.65		3.65	1.55	mg/Kg	☼	09/05/13 11:42	09/09/13 15:43	100
PCB-1242	<3.65		3.65	1.44	mg/Kg	☼	09/05/13 11:42	09/09/13 15:43	100
PCB-1248	<3.65		3.65	1.88	mg/Kg	☼	09/05/13 11:42	09/09/13 15:43	100
PCB-1254	<3.65		3.65	1.88	mg/Kg	☼	09/05/13 11:42	09/09/13 15:43	100
PCB-1260	23.5		3.65	1.88	mg/Kg	☼	09/05/13 11:42	09/09/13 15:43	100
PCB-1262	<3.65		3.65	2.99	mg/Kg	☼	09/05/13 11:42	09/09/13 15:43	100
PCB-1268	<3.65		3.65	1.55	mg/Kg	☼	09/05/13 11:42	09/09/13 15:43	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	09/05/13 11:42	09/09/13 15:43	100
Tetrachloro-m-xylene	0	X	30 - 150	09/05/13 11:42	09/09/13 15:43	100
DCB Decachlorobiphenyl	5664	X	30 - 150	09/05/13 11:42	09/09/13 15:43	100
DCB Decachlorobiphenyl	2089	X	30 - 150	09/05/13 11:42	09/09/13 15:43	100

Client Sample ID: WCSS-03

Date Collected: 09/03/13 15:10

Date Received: 09/05/13 09:30

Lab Sample ID: 480-45074-2

Matrix: Solid

Percent Solids: 75.8

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.439		0.439	0.279	mg/Kg	☼	09/05/13 11:42	09/09/13 16:44	10
PCB-1221	<0.439		0.439	0.213	mg/Kg	☼	09/05/13 11:42	09/09/13 16:44	10
PCB-1232	<0.439		0.439	0.186	mg/Kg	☼	09/05/13 11:42	09/09/13 16:44	10
PCB-1242	<0.439		0.439	0.173	mg/Kg	☼	09/05/13 11:42	09/09/13 16:44	10
PCB-1248	<0.439		0.439	0.226	mg/Kg	☼	09/05/13 11:42	09/09/13 16:44	10
PCB-1254	<0.439		0.439	0.226	mg/Kg	☼	09/05/13 11:42	09/09/13 16:44	10
PCB-1260	1.53		0.439	0.226	mg/Kg	☼	09/05/13 11:42	09/09/13 16:44	10
PCB-1262	<0.439		0.439	0.359	mg/Kg	☼	09/05/13 11:42	09/09/13 16:44	10
PCB-1268	<0.439		0.439	0.186	mg/Kg	☼	09/05/13 11:42	09/09/13 16:44	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	156	X	30 - 150	09/05/13 11:42	09/09/13 16:44	10
Tetrachloro-m-xylene	108		30 - 150	09/05/13 11:42	09/09/13 16:44	10
DCB Decachlorobiphenyl	427	X	30 - 150	09/05/13 11:42	09/09/13 16:44	10
DCB Decachlorobiphenyl	388	X	30 - 150	09/05/13 11:42	09/09/13 16:44	10

Client Sample ID: WCSS-04

Date Collected: 09/03/13 15:15

Date Received: 09/05/13 09:30

Lab Sample ID: 480-45074-3

Matrix: Solid

Percent Solids: 90.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<3.68		3.68	2.34	mg/Kg	☼	09/05/13 11:42	09/09/13 16:59	100
PCB-1221	<3.68		3.68	1.78	mg/Kg	☼	09/05/13 11:42	09/09/13 16:59	100
PCB-1232	<3.68		3.68	1.56	mg/Kg	☼	09/05/13 11:42	09/09/13 16:59	100
PCB-1242	<3.68		3.68	1.45	mg/Kg	☼	09/05/13 11:42	09/09/13 16:59	100
PCB-1248	<3.68		3.68	1.89	mg/Kg	☼	09/05/13 11:42	09/09/13 16:59	100
PCB-1254	<3.68		3.68	1.89	mg/Kg	☼	09/05/13 11:42	09/09/13 16:59	100

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45074-1

Client Sample ID: WCSS-04

Lab Sample ID: 480-45074-3

Date Collected: 09/03/13 15:15

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 90.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	18.9		3.68	1.89	mg/Kg	☼	09/05/13 11:42	09/09/13 16:59	100
PCB-1262	<3.68		3.68	3.01	mg/Kg	☼	09/05/13 11:42	09/09/13 16:59	100
PCB-1268	<3.68		3.68	1.56	mg/Kg	☼	09/05/13 11:42	09/09/13 16:59	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				09/05/13 11:42	09/09/13 16:59	100
Tetrachloro-m-xylene	0	X	30 - 150				09/05/13 11:42	09/09/13 16:59	100
DCB Decachlorobiphenyl	2510	X	30 - 150				09/05/13 11:42	09/09/13 16:59	100
DCB Decachlorobiphenyl	2619	X	30 - 150				09/05/13 11:42	09/09/13 16:59	100

Client Sample ID: WCSS-05

Lab Sample ID: 480-45074-4

Date Collected: 09/03/13 15:20

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 92.7

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1.78		1.78	1.13	mg/Kg	☼	09/05/13 11:42	09/09/13 17:30	50
PCB-1221	<1.78		1.78	0.864	mg/Kg	☼	09/05/13 11:42	09/09/13 17:30	50
PCB-1232	<1.78		1.78	0.756	mg/Kg	☼	09/05/13 11:42	09/09/13 17:30	50
PCB-1242	<1.78		1.78	0.702	mg/Kg	☼	09/05/13 11:42	09/09/13 17:30	50
PCB-1248	<1.78		1.78	0.918	mg/Kg	☼	09/05/13 11:42	09/09/13 17:30	50
PCB-1254	<1.78		1.78	0.918	mg/Kg	☼	09/05/13 11:42	09/09/13 17:30	50
PCB-1260	3.17		1.78	0.918	mg/Kg	☼	09/05/13 11:42	09/09/13 17:30	50
PCB-1262	<1.78		1.78	1.46	mg/Kg	☼	09/05/13 11:42	09/09/13 17:30	50
PCB-1268	<1.78		1.78	0.756	mg/Kg	☼	09/05/13 11:42	09/09/13 17:30	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				09/05/13 11:42	09/09/13 17:30	50
Tetrachloro-m-xylene	0	X	30 - 150				09/05/13 11:42	09/09/13 17:30	50
DCB Decachlorobiphenyl	748	X	30 - 150				09/05/13 11:42	09/09/13 17:30	50
DCB Decachlorobiphenyl	520	X	30 - 150				09/05/13 11:42	09/09/13 17:30	50

Client Sample ID: WCSS-06

Lab Sample ID: 480-45074-5

Date Collected: 09/03/13 15:25

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 92.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.358		0.358	0.228	mg/Kg	☼	09/05/13 11:42	09/09/13 17:45	10
PCB-1221	<0.358		0.358	0.174	mg/Kg	☼	09/05/13 11:42	09/09/13 17:45	10
PCB-1232	<0.358		0.358	0.152	mg/Kg	☼	09/05/13 11:42	09/09/13 17:45	10
PCB-1242	<0.358		0.358	0.141	mg/Kg	☼	09/05/13 11:42	09/09/13 17:45	10
PCB-1248	<0.358		0.358	0.184	mg/Kg	☼	09/05/13 11:42	09/09/13 17:45	10
PCB-1254	<0.358		0.358	0.184	mg/Kg	☼	09/05/13 11:42	09/09/13 17:45	10
PCB-1260	2.18		0.358	0.184	mg/Kg	☼	09/05/13 11:42	09/09/13 17:45	10
PCB-1262	<0.358		0.358	0.293	mg/Kg	☼	09/05/13 11:42	09/09/13 17:45	10
PCB-1268	<0.358		0.358	0.152	mg/Kg	☼	09/05/13 11:42	09/09/13 17:45	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	588	X	30 - 150				09/05/13 11:42	09/09/13 17:45	10
Tetrachloro-m-xylene	114		30 - 150				09/05/13 11:42	09/09/13 17:45	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45074-1

Client Sample ID: WCSS-06

Lab Sample ID: 480-45074-5

Date Collected: 09/03/13 15:25

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 92.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	401	X	30 - 150	09/05/13 11:42	09/09/13 17:45	10
DCB Decachlorobiphenyl	326	X	30 - 150	09/05/13 11:42	09/09/13 17:45	10

Client Sample ID: WCSS-07

Lab Sample ID: 480-45074-6

Date Collected: 09/03/13 15:30

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 91.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.361		0.361	0.230	mg/Kg	☼	09/05/13 11:42	09/09/13 18:46	10
PCB-1221	<0.361		0.361	0.175	mg/Kg	☼	09/05/13 11:42	09/09/13 18:46	10
PCB-1232	<0.361		0.361	0.153	mg/Kg	☼	09/05/13 11:42	09/09/13 18:46	10
PCB-1242	<0.361		0.361	0.142	mg/Kg	☼	09/05/13 11:42	09/09/13 18:46	10
PCB-1248	<0.361		0.361	0.186	mg/Kg	☼	09/05/13 11:42	09/09/13 18:46	10
PCB-1254	<0.361		0.361	0.186	mg/Kg	☼	09/05/13 11:42	09/09/13 18:46	10
PCB-1260	1.93		0.361	0.186	mg/Kg	☼	09/05/13 11:42	09/09/13 18:46	10
PCB-1262	<0.361		0.361	0.295	mg/Kg	☼	09/05/13 11:42	09/09/13 18:46	10
PCB-1268	<0.361		0.361	0.153	mg/Kg	☼	09/05/13 11:42	09/09/13 18:46	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	813	X	30 - 150	09/05/13 11:42	09/09/13 18:46	10
Tetrachloro-m-xylene	196	X	30 - 150	09/05/13 11:42	09/09/13 18:46	10
DCB Decachlorobiphenyl	506	X	30 - 150	09/05/13 11:42	09/09/13 18:46	10
DCB Decachlorobiphenyl	515	X	30 - 150	09/05/13 11:42	09/09/13 18:46	10

Client Sample ID: WCSS-08

Lab Sample ID: 480-45074-7

Date Collected: 09/03/13 15:35

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 85.1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.393		0.393	0.250	mg/Kg	☼	09/05/13 11:42	09/09/13 19:01	10
PCB-1221	<0.393		0.393	0.191	mg/Kg	☼	09/05/13 11:42	09/09/13 19:01	10
PCB-1232	<0.393		0.393	0.167	mg/Kg	☼	09/05/13 11:42	09/09/13 19:01	10
PCB-1242	<0.393		0.393	0.155	mg/Kg	☼	09/05/13 11:42	09/09/13 19:01	10
PCB-1248	<0.393		0.393	0.203	mg/Kg	☼	09/05/13 11:42	09/09/13 19:01	10
PCB-1254	<0.393		0.393	0.203	mg/Kg	☼	09/05/13 11:42	09/09/13 19:01	10
PCB-1260	1.57		0.393	0.203	mg/Kg	☼	09/05/13 11:42	09/09/13 19:01	10
PCB-1262	<0.393		0.393	0.322	mg/Kg	☼	09/05/13 11:42	09/09/13 19:01	10
PCB-1268	<0.393		0.393	0.167	mg/Kg	☼	09/05/13 11:42	09/09/13 19:01	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	224	X	30 - 150	09/05/13 11:42	09/09/13 19:01	10
Tetrachloro-m-xylene	110		30 - 150	09/05/13 11:42	09/09/13 19:01	10
DCB Decachlorobiphenyl	156	X	30 - 150	09/05/13 11:42	09/09/13 19:01	10
DCB Decachlorobiphenyl	131		30 - 150	09/05/13 11:42	09/09/13 19:01	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Client Sample ID: WCSS-09

Lab Sample ID: 480-45074-8

Date Collected: 09/03/13 15:40

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 80.7

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<4.10		4.10	2.61	mg/Kg	☼	09/05/13 11:42	09/09/13 19:31	100
PCB-1221	<4.10		4.10	1.99	mg/Kg	☼	09/05/13 11:42	09/09/13 19:31	100
PCB-1232	<4.10		4.10	1.74	mg/Kg	☼	09/05/13 11:42	09/09/13 19:31	100
PCB-1242	<4.10		4.10	1.62	mg/Kg	☼	09/05/13 11:42	09/09/13 19:31	100
PCB-1248	<4.10		4.10	2.11	mg/Kg	☼	09/05/13 11:42	09/09/13 19:31	100
PCB-1254	<4.10		4.10	2.11	mg/Kg	☼	09/05/13 11:42	09/09/13 19:31	100
PCB-1260	21.0		4.10	2.11	mg/Kg	☼	09/05/13 11:42	09/09/13 19:31	100
PCB-1262	<4.10		4.10	3.35	mg/Kg	☼	09/05/13 11:42	09/09/13 19:31	100
PCB-1268	<4.10		4.10	1.74	mg/Kg	☼	09/05/13 11:42	09/09/13 19:31	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	09/05/13 11:42	09/09/13 19:31	100
Tetrachloro-m-xylene	0	X	30 - 150	09/05/13 11:42	09/09/13 19:31	100
DCB Decachlorobiphenyl	0	X	30 - 150	09/05/13 11:42	09/09/13 19:31	100
DCB Decachlorobiphenyl	0	X	30 - 150	09/05/13 11:42	09/09/13 19:31	100

Client Sample ID: WCSS-10

Lab Sample ID: 480-45074-9

Date Collected: 09/03/13 15:45

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 86.9

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<38.5		38.5	24.5	mg/Kg	☼	09/05/13 11:42	09/10/13 14:55	1000
PCB-1221	<38.5		38.5	18.6	mg/Kg	☼	09/05/13 11:42	09/10/13 14:55	1000
PCB-1232	<38.5		38.5	16.3	mg/Kg	☼	09/05/13 11:42	09/10/13 14:55	1000
PCB-1242	<38.5		38.5	15.2	mg/Kg	☼	09/05/13 11:42	09/10/13 14:55	1000
PCB-1248	<38.5		38.5	19.8	mg/Kg	☼	09/05/13 11:42	09/10/13 14:55	1000
PCB-1254	<38.5		38.5	19.8	mg/Kg	☼	09/05/13 11:42	09/10/13 14:55	1000
PCB-1260	92.2		38.5	19.8	mg/Kg	☼	09/05/13 11:42	09/10/13 14:55	1000
PCB-1262	<38.5		38.5	31.5	mg/Kg	☼	09/05/13 11:42	09/10/13 14:55	1000
PCB-1268	<38.5		38.5	16.3	mg/Kg	☼	09/05/13 11:42	09/10/13 14:55	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	61795	X	30 - 150	09/05/13 11:42	09/10/13 14:55	1000
Tetrachloro-m-xylene	11888	X	30 - 150	09/05/13 11:42	09/10/13 14:55	1000
DCB Decachlorobiphenyl	19746	X	30 - 150	09/05/13 11:42	09/10/13 14:55	1000
DCB Decachlorobiphenyl	13291	X	30 - 150	09/05/13 11:42	09/10/13 14:55	1000

Client Sample ID: WCSS-902

Lab Sample ID: 480-45074-10

Date Collected: 09/03/13 15:05

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 83.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<3.97		3.97	2.53	mg/Kg	☼	09/05/13 11:42	09/09/13 23:23	100
PCB-1221	<3.97		3.97	1.93	mg/Kg	☼	09/05/13 11:42	09/09/13 23:23	100
PCB-1232	<3.97		3.97	1.69	mg/Kg	☼	09/05/13 11:42	09/09/13 23:23	100
PCB-1242	<3.97		3.97	1.57	mg/Kg	☼	09/05/13 11:42	09/09/13 23:23	100
PCB-1248	<3.97		3.97	2.05	mg/Kg	☼	09/05/13 11:42	09/09/13 23:23	100
PCB-1254	<3.97		3.97	2.05	mg/Kg	☼	09/05/13 11:42	09/09/13 23:23	100

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Client Sample ID: WCSS-902

Lab Sample ID: 480-45074-10

Date Collected: 09/03/13 15:05

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 83.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	25.3		3.97	2.05	mg/Kg	⚠	09/05/13 11:42	09/09/13 23:23	100
PCB-1262	<3.97		3.97	3.25	mg/Kg	⚠	09/05/13 11:42	09/09/13 23:23	100
PCB-1268	<3.97		3.97	1.69	mg/Kg	⚠	09/05/13 11:42	09/09/13 23:23	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				09/05/13 11:42	09/09/13 23:23	100
Tetrachloro-m-xylene	0	X	30 - 150				09/05/13 11:42	09/09/13 23:23	100
DCB Decachlorobiphenyl	3428	X	30 - 150				09/05/13 11:42	09/09/13 23:23	100
DCB Decachlorobiphenyl	3284	X	30 - 150				09/05/13 11:42	09/09/13 23:23	100

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (30-150)	TCX2 (30-150)	DCB1 (30-150)	DCB2 (30-150)
480-45074-1	WCSS-02	0 X	0 X	5664 X	2089 X
480-45074-1 MS	WCSS-02	0 X	0 X	2625 X	1426 X
480-45074-1 MSD	WCSS-02	0 X	0 X	3847 X	1696 X
480-45074-2	WCSS-03	156 X	108	427 X	388 X
480-45074-3	WCSS-04	0 X	0 X	2510 X	2619 X
480-45074-4	WCSS-05	0 X	0 X	748 X	520 X
480-45074-5	WCSS-06	588 X	114	401 X	326 X
480-45074-6	WCSS-07	813 X	196 X	506 X	515 X
480-45074-7	WCSS-08	224 X	110	156 X	131
480-45074-8	WCSS-09	0 X	0 X	0 X	0 X
480-45074-9	WCSS-10	61795 X	11888 X	19746 X	13291 X
480-45074-10	WCSS-902	0 X	0 X	3428 X	3284 X
LCS 240-100258/15-A	Lab Control Sample	87	41	91	103
LCSD 240-100258/16-A	Lab Control Sample Dup	87	82	82	88
MB 240-100258/14-A	Method Blank	104	100	84	91

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Lab Sample ID: MB 240-100258/14-A

Matrix: Solid

Analysis Batch: 100690

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 100258

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0330		0.0330	0.0210	mg/Kg		09/05/13 11:42	09/09/13 18:15	1
PCB-1221	<0.0330		0.0330	0.0160	mg/Kg		09/05/13 11:42	09/09/13 18:15	1
PCB-1232	<0.0330		0.0330	0.0140	mg/Kg		09/05/13 11:42	09/09/13 18:15	1
PCB-1242	<0.0330		0.0330	0.0130	mg/Kg		09/05/13 11:42	09/09/13 18:15	1
PCB-1248	<0.0330		0.0330	0.0170	mg/Kg		09/05/13 11:42	09/09/13 18:15	1
PCB-1254	<0.0330		0.0330	0.0170	mg/Kg		09/05/13 11:42	09/09/13 18:15	1
PCB-1260	<0.0330		0.0330	0.0170	mg/Kg		09/05/13 11:42	09/09/13 18:15	1
PCB-1262	<0.0330		0.0330	0.0270	mg/Kg		09/05/13 11:42	09/09/13 18:15	1
PCB-1268	<0.0330		0.0330	0.0140	mg/Kg		09/05/13 11:42	09/09/13 18:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	104		30 - 150	09/05/13 11:42	09/09/13 18:15	1
Tetrachloro-m-xylene	100		30 - 150	09/05/13 11:42	09/09/13 18:15	1
DCB Decachlorobiphenyl	84		30 - 150	09/05/13 11:42	09/09/13 18:15	1
DCB Decachlorobiphenyl	91		30 - 150	09/05/13 11:42	09/09/13 18:15	1

Lab Sample ID: LCS 240-100258/15-A

Matrix: Solid

Analysis Batch: 100690

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 100258

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.333	0.2974		mg/Kg		89	40 - 140
PCB-1260	0.333	0.3217		mg/Kg		97	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	87		30 - 150
Tetrachloro-m-xylene	41		30 - 150
DCB Decachlorobiphenyl	91		30 - 150
DCB Decachlorobiphenyl	103		30 - 150

Lab Sample ID: LCSD 240-100258/16-A

Matrix: Solid

Analysis Batch: 100690

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 100258

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.333	0.2629		mg/Kg		79	40 - 140	12	30
PCB-1260	0.333	0.2837		mg/Kg		85	40 - 140	13	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	87		30 - 150
Tetrachloro-m-xylene	82		30 - 150
DCB Decachlorobiphenyl	82		30 - 150
DCB Decachlorobiphenyl	88		30 - 150

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: 480-45074-1 MS

Matrix: Solid

Analysis Batch: 100690

Client Sample ID: WCSS-02

Prep Type: Total/NA

Prep Batch: 100258

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	<3.65		0.363	123.7	E	mg/Kg	✱	NC	40 - 140
PCB-1260	23.5		0.363	10.49	4	mg/Kg	✱	-3599	40 - 140
Surrogate	MS %Recovery	MS Qualifier	Limits						
Tetrachloro-m-xylene	0	X	30 - 150						
Tetrachloro-m-xylene	0	X	30 - 150						
DCB Decachlorobiphenyl	2625	X	30 - 150						
DCB Decachlorobiphenyl	1426	X	30 - 150						

Lab Sample ID: 480-45074-1 MSD

Matrix: Solid

Analysis Batch: 100690

Client Sample ID: WCSS-02

Prep Type: Total/NA

Prep Batch: 100258

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
PCB-1016	<3.65		0.361	186.0	E	mg/Kg	✱	NC	40 - 140	40	50
PCB-1260	23.5		0.361	16.61	4	mg/Kg	✱	-1921	40 - 140	45	50
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
Tetrachloro-m-xylene	0	X	30 - 150								
Tetrachloro-m-xylene	0	X	30 - 150								
DCB Decachlorobiphenyl	3847	X	30 - 150								
DCB Decachlorobiphenyl	1696	X	30 - 150								

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45074-1

GC Semi VOA

Prep Batch: 100258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45074-1	WCSS-02	Total/NA	Solid	3540C	
480-45074-1 MS	WCSS-02	Total/NA	Solid	3540C	
480-45074-1 MSD	WCSS-02	Total/NA	Solid	3540C	
480-45074-2	WCSS-03	Total/NA	Solid	3540C	
480-45074-3	WCSS-04	Total/NA	Solid	3540C	
480-45074-4	WCSS-05	Total/NA	Solid	3540C	
480-45074-5	WCSS-06	Total/NA	Solid	3540C	
480-45074-6	WCSS-07	Total/NA	Solid	3540C	
480-45074-7	WCSS-08	Total/NA	Solid	3540C	
480-45074-8	WCSS-09	Total/NA	Solid	3540C	
480-45074-9	WCSS-10	Total/NA	Solid	3540C	
480-45074-10	WCSS-902	Total/NA	Solid	3540C	
LCS 240-100258/15-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-100258/16-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-100258/14-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 100690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45074-1	WCSS-02	Total/NA	Solid	8082	100258
480-45074-1 MS	WCSS-02	Total/NA	Solid	8082	100258
480-45074-1 MSD	WCSS-02	Total/NA	Solid	8082	100258
480-45074-2	WCSS-03	Total/NA	Solid	8082	100258
480-45074-3	WCSS-04	Total/NA	Solid	8082	100258
480-45074-4	WCSS-05	Total/NA	Solid	8082	100258
480-45074-5	WCSS-06	Total/NA	Solid	8082	100258
480-45074-6	WCSS-07	Total/NA	Solid	8082	100258
480-45074-7	WCSS-08	Total/NA	Solid	8082	100258
480-45074-8	WCSS-09	Total/NA	Solid	8082	100258
480-45074-10	WCSS-902	Total/NA	Solid	8082	100258
LCS 240-100258/15-A	Lab Control Sample	Total/NA	Solid	8082	100258
LCSD 240-100258/16-A	Lab Control Sample Dup	Total/NA	Solid	8082	100258
MB 240-100258/14-A	Method Blank	Total/NA	Solid	8082	100258

Analysis Batch: 100863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45074-9	WCSS-10	Total/NA	Solid	8082	100258

General Chemistry

Analysis Batch: 100331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45074-1	WCSS-02	Total/NA	Solid	Moisture	
480-45074-1 DU	WCSS-02	Total/NA	Solid	Moisture	
480-45074-2	WCSS-03	Total/NA	Solid	Moisture	
480-45074-3	WCSS-04	Total/NA	Solid	Moisture	
480-45074-4	WCSS-05	Total/NA	Solid	Moisture	
480-45074-5	WCSS-06	Total/NA	Solid	Moisture	
480-45074-6	WCSS-07	Total/NA	Solid	Moisture	
480-45074-7	WCSS-08	Total/NA	Solid	Moisture	
480-45074-8	WCSS-09	Total/NA	Solid	Moisture	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

General Chemistry (Continued)

Analysis Batch: 100331 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45074-9	WCSS-10	Total/NA	Solid	Moisture	
480-45074-10	WCSS-902	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Client Sample ID: WCSS-02

Date Collected: 09/03/13 15:05

Date Received: 09/05/13 09:30

Lab Sample ID: 480-45074-1

Matrix: Solid

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			100258	09/05/13 11:42	CSC	TAL CAN
Total/NA	Analysis	8082		100	100690	09/09/13 15:43	HMB	TAL CAN
Total/NA	Analysis	Moisture		1	100331	09/05/13 15:08	NJE	TAL CAN

Client Sample ID: WCSS-03

Date Collected: 09/03/13 15:10

Date Received: 09/05/13 09:30

Lab Sample ID: 480-45074-2

Matrix: Solid

Percent Solids: 75.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			100258	09/05/13 11:42	CSC	TAL CAN
Total/NA	Analysis	8082		10	100690	09/09/13 16:44	HMB	TAL CAN
Total/NA	Analysis	Moisture		1	100331	09/05/13 15:08	NJE	TAL CAN

Client Sample ID: WCSS-04

Date Collected: 09/03/13 15:15

Date Received: 09/05/13 09:30

Lab Sample ID: 480-45074-3

Matrix: Solid

Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		100	100690	09/09/13 16:59	HMB	TAL CAN
Total/NA	Prep	3540C			100258	09/05/13 11:42	CSC	TAL CAN
Total/NA	Analysis	Moisture		1	100331	09/05/13 15:08	NJE	TAL CAN

Client Sample ID: WCSS-05

Date Collected: 09/03/13 15:20

Date Received: 09/05/13 09:30

Lab Sample ID: 480-45074-4

Matrix: Solid

Percent Solids: 92.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			100258	09/05/13 11:42	CSC	TAL CAN
Total/NA	Analysis	8082		50	100690	09/09/13 17:30	HMB	TAL CAN
Total/NA	Analysis	Moisture		1	100331	09/05/13 15:08	NJE	TAL CAN

Client Sample ID: WCSS-06

Date Collected: 09/03/13 15:25

Date Received: 09/05/13 09:30

Lab Sample ID: 480-45074-5

Matrix: Solid

Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			100258	09/05/13 11:42	CSC	TAL CAN
Total/NA	Analysis	8082		10	100690	09/09/13 17:45	HMB	TAL CAN
Total/NA	Analysis	Moisture		1	100331	09/05/13 15:08	NJE	TAL CAN

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Client Sample ID: WCSS-07

Lab Sample ID: 480-45074-6

Date Collected: 09/03/13 15:30

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			100258	09/05/13 11:42	CSC	TAL CAN
Total/NA	Analysis	8082		10	100690	09/09/13 18:46	HMB	TAL CAN
Total/NA	Analysis	Moisture		1	100331	09/05/13 15:08	NJE	TAL CAN

Client Sample ID: WCSS-08

Lab Sample ID: 480-45074-7

Date Collected: 09/03/13 15:35

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			100258	09/05/13 11:42	CSC	TAL CAN
Total/NA	Analysis	8082		10	100690	09/09/13 19:01	HMB	TAL CAN
Total/NA	Analysis	Moisture		1	100331	09/05/13 15:08	NJE	TAL CAN

Client Sample ID: WCSS-09

Lab Sample ID: 480-45074-8

Date Collected: 09/03/13 15:40

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		100	100690	09/09/13 19:31	HMB	TAL CAN
Total/NA	Prep	3540C			100258	09/05/13 11:42	CSC	TAL CAN
Total/NA	Analysis	Moisture		1	100331	09/05/13 15:08	NJE	TAL CAN

Client Sample ID: WCSS-10

Lab Sample ID: 480-45074-9

Date Collected: 09/03/13 15:45

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1000	100863	09/10/13 14:55	HMB	TAL CAN
Total/NA	Prep	3540C			100258	09/05/13 11:42	CSC	TAL CAN
Total/NA	Analysis	Moisture		1	100331	09/05/13 15:08	NJE	TAL CAN

Client Sample ID: WCSS-902

Lab Sample ID: 480-45074-10

Date Collected: 09/03/13 15:05

Matrix: Solid

Date Received: 09/05/13 09:30

Percent Solids: 83.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			100258	09/05/13 11:42	CSC	TAL CAN
Total/NA	Analysis	8082		100	100690	09/09/13 23:23	HMB	TAL CAN
Total/NA	Analysis	Moisture		1	100331	09/05/13 15:08	NJE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

TestAmerica Buffalo

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	10-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13 *
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-14

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Laboratory: TestAmerica Canton (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-14

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45074-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-45074-1	WCSS-02	Solid	09/03/13 15:05	09/05/13 09:30
480-45074-2	WCSS-03	Solid	09/03/13 15:10	09/05/13 09:30
480-45074-3	WCSS-04	Solid	09/03/13 15:15	09/05/13 09:30
480-45074-4	WCSS-05	Solid	09/03/13 15:20	09/05/13 09:30
480-45074-5	WCSS-06	Solid	09/03/13 15:25	09/05/13 09:30
480-45074-6	WCSS-07	Solid	09/03/13 15:30	09/05/13 09:30
480-45074-7	WCSS-08	Solid	09/03/13 15:35	09/05/13 09:30
480-45074-8	WCSS-09	Solid	09/03/13 15:40	09/05/13 09:30
480-45074-9	WCSS-10	Solid	09/03/13 15:45	09/05/13 09:30
480-45074-10	WCSS-902	Solid	09/03/13 15:05	09/05/13 09:30

1 2 3 4 5 6 7 8 9 10 11 12 13 14

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-44524-2

Client Project/Site: Quincy Inervale

For:

Woodard & Curran Inc

95 Cedar St

Suite 100

Providence, Rhode Island 02903

Attn: Ms. Andrea Hevey



Authorized for release by:

9/6/2013 9:54:55 AM

Becky Mason, Project Manager II

becky.mason@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-2

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
B	Compound was found in the blank and sample.
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-2

Job ID: 480-44524-2

Laboratory: TestAmerica Buffalo

Narrative

Receipt

The sample was received on 8/24/2013 1:10 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9° C.

GC Semi VOA

Method MA-EPH: The laboratory control sample duplicate for batch 137023 recovered outside control limits for the following analyte, naphthlene.

Method MA-EPH: Surrogate recovery for the following sample was outside control limits: WCSS-01 (480-44524-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method MA-EPH: The method blank contained Benzo[g,h,i]perylene, Diobenz(a,h)anthracene, Indeno[1,2,3-cd]pyrene, Phenanthrene, and C16-C36 Aliphatics above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. All associated sample positives are qualified with the "B" flag to indicate such. WCSS-01 (480-44524-1).

Per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol; however they do achieve method 1 S1 standards.

No other analytical or quality issues were noted.

Organic Prep

Method 3546: Due to the matrix, the following sample could not be concentrated to the final method required volume: WCSS-01 (480-44524-1). The reporting limits (RLs) are elevated proportionately.

Method 3546: Final concentrated volume of 1 mL is very thick and dark brown.

No other analytical or quality issues were noted.

MassDEP Analytical Protocol Certification Form					
Laboratory Name: TestAmerica Buffalo		Project #: 480-44524-2			
Project Location: Quincy		RTN:			
This form provides certifications for the following data set: list Laboratory Sample ID Number(s): 480-44524-2[1]					
Matrices: <input type="checkbox"/> Groundwater/Surface Water <input checked="" type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
CAM Protocols (check all that apply below):					
8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	Mass DEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	6010 Metals CAM III C <input type="checkbox"/>	Mass DEP EPH CAM IV B <input checked="" type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input type="checkbox"/>	9014 Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Responses to Questions G, H and I below are required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
¹ All negative responses must be addressed in an attached laboratory narrative.					
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.					
Signature:		Position: Project Manager			
Printed Name: Becky Mason		Date: 9/6/13 9:22			
This form has been electronically signed and approved					

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-44524-2

Client Sample ID: WCSS-01

Lab Sample ID: 480-44524-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene - RE	6.06		3.08	0.499	mg/Kg	1	☼	MA-EPH	Total/NA
Acenaphthylene - RE	6.14		3.08	0.554	mg/Kg	1	☼	MA-EPH	Total/NA
Anthracene - RE	18.7		3.08	0.585	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]anthracene - RE	21.8		3.08	0.468	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]pyrene - RE	21.8		3.08	0.443	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[b]fluoranthene - RE	27.9		3.08	0.437	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[g,h,i]perylene - RE	11.8	B	3.08	0.523	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[k]fluoranthene - RE	12.4		3.08	0.449	mg/Kg	1	☼	MA-EPH	Total/NA
2-Methylnaphthalene - RE	6.14		3.08	0.603	mg/Kg	1	☼	MA-EPH	Total/NA
Chrysene - RE	38.7		3.08	0.548	mg/Kg	1	☼	MA-EPH	Total/NA
Dibenz(a,h)anthracene - RE	8.87	B	3.08	0.431	mg/Kg	1	☼	MA-EPH	Total/NA
Fluoranthene - RE	52.4		3.08	0.542	mg/Kg	1	☼	MA-EPH	Total/NA
Fluorene - RE	7.08		3.08	0.616	mg/Kg	1	☼	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene - RE	13.6	B	3.08	0.449	mg/Kg	1	☼	MA-EPH	Total/NA
Naphthalene - RE	3.55	*	3.08	0.517	mg/Kg	1	☼	MA-EPH	Total/NA
Phenanthrene - RE	42.4	B	3.08	0.616	mg/Kg	1	☼	MA-EPH	Total/NA
Pyrene - RE	36.0		3.08	0.560	mg/Kg	1	☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted) - RE	2800		30.8	12.3	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics - RE	3030	B	30.8	12.3	mg/Kg	1	☼	MA-EPH	Total/NA
C9-C18 Aliphatics - RE	1180		30.8	12.3	mg/Kg	1	☼	MA-EPH	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	2470		6.25	6.25	mg/Kg	1	☼	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-2

Client Sample ID: WCSS-01

Lab Sample ID: 480-44524-1

Date Collected: 08/23/13 10:10

Matrix: Solid

Date Received: 08/24/13 01:10

Percent Solids: 79.9

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	2470		6.25	6.25	mg/Kg	☼		09/04/13 09:28	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	6.06		3.08	0.499	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Acenaphthylene	6.14		3.08	0.554	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Anthracene	18.7		3.08	0.585	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Benzo[a]anthracene	21.8		3.08	0.468	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Benzo[a]pyrene	21.8		3.08	0.443	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Benzo[b]fluoranthene	27.9		3.08	0.437	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Benzo[g,h,i]perylene	11.8	B	3.08	0.523	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Benzo[k]fluoranthene	12.4		3.08	0.449	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
2-Methylnaphthalene	6.14		3.08	0.603	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Chrysene	38.7		3.08	0.548	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Dibenz(a,h)anthracene	8.87	B	3.08	0.431	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Fluoranthene	52.4		3.08	0.542	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Fluorene	7.08		3.08	0.616	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Indeno[1,2,3-cd]pyrene	13.6	B	3.08	0.449	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Naphthalene	3.55	*	3.08	0.517	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Phenanthrene	42.4	B	3.08	0.616	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
Pyrene	36.0		3.08	0.560	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
C11-C22 Aromatics (unadjusted)	2800		30.8	12.3	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
C19-C36 Aliphatics	3030	B	30.8	12.3	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1
C9-C18 Aliphatics	1180		30.8	12.3	mg/Kg	☼	09/03/13 09:54	09/04/13 05:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	16	X	40 - 140	09/03/13 09:54	09/04/13 05:10	1
2-Bromonaphthalene	26	X	40 - 140	09/03/13 09:54	09/04/13 05:10	1
2-Fluorobiphenyl	24	X	40 - 140	09/03/13 09:54	09/04/13 05:10	1
o-Terphenyl	38	X	40 - 140	09/03/13 09:54	09/04/13 05:10	1

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-2

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		1COD2 (40-140)	2BN1 (40-140)	FBP1 (40-140)	OTPH1 (40-140)
480-44524-1 - RE	WCSS-01	16 X	26 X	24 X	38 X
LCS 480-137023/2-B	Lab Control Sample	76	68	92	76
LCSD 480-137023/3-B	Lab Control Sample Dup	71	67	91	67
MB 480-137023/1-B	Method Blank	74	71	90	73

Surrogate Legend

1COD = 1-Chlorooctadecane

2BN = 2-Bromonaphthalene

FBP = 2-Fluorobiphenyl

OTPH = o-Terphenyl

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-44524-2

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 480-137023/1-B

Matrix: Solid

Analysis Batch: 137142

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 137023

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.468		0.468	0.0758	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Acenaphthylene	<0.468		0.468	0.0842	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Anthracene	<0.468		0.468	0.0889	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Benzo[a]anthracene	<0.468		0.468	0.0711	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Benzo[a]pyrene	<0.468		0.468	0.0674	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Benzo[b]fluoranthene	<0.468		0.468	0.0664	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Benzo[g,h,i]perylene	0.1964	J	0.468	0.0795	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Benzo[k]fluoranthene	<0.468		0.468	0.0683	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
2-Methylnaphthalene	<0.468		0.468	0.0917	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Chrysene	<0.468		0.468	0.0833	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Dibenz(a,h)anthracene	0.09118	J	0.468	0.0655	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Fluoranthene	<0.468		0.468	0.0823	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Fluorene	<0.468		0.468	0.0935	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Indeno[1,2,3-cd]pyrene	0.1103	J	0.468	0.0683	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Naphthalene	<0.468		0.468	0.0786	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Phenanthrene	0.1137	J	0.468	0.0935	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
Pyrene	<0.468		0.468	0.0851	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
C11-C22 Aromatics (unadjusted)	<4.68		4.68	1.87	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
C19-C36 Aliphatics	1.911	J	4.68	1.87	mg/Kg		09/03/13 09:53	09/04/13 03:42	1
C9-C18 Aliphatics	<4.68		4.68	1.87	mg/Kg		09/03/13 09:53	09/04/13 03:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	74		40 - 140	09/03/13 09:53	09/04/13 03:42	1
2-Bromonaphthalene	71		40 - 140	09/03/13 09:53	09/04/13 03:42	1
2-Fluorobiphenyl	90		40 - 140	09/03/13 09:53	09/04/13 03:42	1
o-Terphenyl	73		40 - 140	09/03/13 09:53	09/04/13 03:42	1

Lab Sample ID: LCS 480-137023/2-B

Matrix: Solid

Analysis Batch: 137142

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 137023

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	4.89	2.807		mg/Kg		57	40 - 140
Acenaphthylene	4.89	3.141		mg/Kg		64	40 - 140
Anthracene	4.89	4.050		mg/Kg		83	40 - 140
Benzo[a]anthracene	4.89	4.223		mg/Kg		86	40 - 140
Benzo[a]pyrene	4.89	4.287		mg/Kg		88	40 - 140
Benzo[b]fluoranthene	4.89	4.298		mg/Kg		88	40 - 140
Benzo[g,h,i]perylene	4.89	3.495		mg/Kg		71	40 - 140
Benzo[k]fluoranthene	4.89	4.224		mg/Kg		86	40 - 140
2-Methylnaphthalene	4.89	2.399		mg/Kg		49	40 - 140
Chrysene	4.89	4.291		mg/Kg		88	40 - 140
Dibenz(a,h)anthracene	4.89	3.898		mg/Kg		80	40 - 140
Fluoranthene	4.89	4.013		mg/Kg		82	40 - 140
Fluorene	4.89	3.559		mg/Kg		73	40 - 140
Indeno[1,2,3-cd]pyrene	4.89	3.713		mg/Kg		76	40 - 140
Naphthalene	4.89	2.088		mg/Kg		43	40 - 140
Phenanthrene	4.89	3.930		mg/Kg		80	40 - 140

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-44524-2

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCS 480-137023/2-B

Matrix: Solid

Analysis Batch: 137142

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 137023

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pyrene	4.89	4.102		mg/Kg		84	40 - 140
C11-C22 Aromatics (unadjusted)	83.2	61.37		mg/Kg		74	40 - 140
C19-C36 Aliphatics	39.1	26.63		mg/Kg		68	40 - 140
C9-C18 Aliphatics	29.4	17.39		mg/Kg		59	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	76		40 - 140
2-Bromonaphthalene	68		40 - 140
2-Fluorobiphenyl	92		40 - 140
o-Terphenyl	76		40 - 140

Lab Sample ID: LCSD 480-137023/3-B

Matrix: Solid

Analysis Batch: 137142

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 137023

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	4.69	2.504		mg/Kg		53	40 - 140	11	25
Acenaphthylene	4.69	2.714		mg/Kg		58	40 - 140	15	25
Anthracene	4.69	3.426		mg/Kg		73	40 - 140	17	25
Benzo[a]anthracene	4.69	3.592		mg/Kg		77	40 - 140	16	25
Benzo[a]pyrene	4.69	3.625		mg/Kg		77	40 - 140	17	25
Benzo[b]fluoranthene	4.69	3.623		mg/Kg		77	40 - 140	17	25
Benzo[g,h,i]perylene	4.69	2.999		mg/Kg		64	40 - 140	15	25
Benzo[k]fluoranthene	4.69	3.600		mg/Kg		77	40 - 140	16	25
2-Methylnaphthalene	4.69	2.144		mg/Kg		46	40 - 140	11	25
Chrysene	4.69	3.649		mg/Kg		78	40 - 140	16	25
Dibenz(a,h)anthracene	4.69	3.361		mg/Kg		72	40 - 140	15	25
Fluoranthene	4.69	3.408		mg/Kg		73	40 - 140	16	25
Fluorene	4.69	3.026		mg/Kg		64	40 - 140	16	25
Indeno[1,2,3-cd]pyrene	4.69	3.157		mg/Kg		67	40 - 140	16	25
Naphthalene	4.69	1.830	*	mg/Kg		39	40 - 140	13	25
Phenanthrene	4.69	3.324		mg/Kg		71	40 - 140	17	25
Pyrene	4.69	3.469		mg/Kg		74	40 - 140	17	25
C11-C22 Aromatics (unadjusted)	79.8	52.56		mg/Kg		66	40 - 140	15	25
C19-C36 Aliphatics	37.6	23.97		mg/Kg		64	40 - 140	11	25
C9-C18 Aliphatics	28.2	15.07		mg/Kg		53	40 - 140	14	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctadecane	71		40 - 140
2-Bromonaphthalene	67		40 - 140
2-Fluorobiphenyl	91		40 - 140
o-Terphenyl	67		40 - 140

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-2

GC Semi VOA

Prep Batch: 137023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44524-1 - RE	WCSS-01	Total/NA	Solid	3546	
LCS 480-137023/2-B	Lab Control Sample	Total/NA	Solid	3546	
LCSD 480-137023/3-B	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 480-137023/1-B	Method Blank	Total/NA	Solid	3546	

Fraction Batch: 137110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44524-1 - RE	WCSS-01	Total/NA	Solid	MA EPH Frac	137023
LCS 480-137023/2-B	Lab Control Sample	Total/NA	Solid	MA EPH Frac	137023
LCSD 480-137023/3-B	Lab Control Sample Dup	Total/NA	Solid	MA EPH Frac	137023
MB 480-137023/1-B	Method Blank	Total/NA	Solid	MA EPH Frac	137023

Analysis Batch: 137142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44524-1 - RE	WCSS-01	Total/NA	Solid	MA-EPH	137110
LCS 480-137023/2-B	Lab Control Sample	Total/NA	Solid	MA-EPH	137110
LCSD 480-137023/3-B	Lab Control Sample Dup	Total/NA	Solid	MA-EPH	137110
MB 480-137023/1-B	Method Blank	Total/NA	Solid	MA-EPH	137110

Analysis Batch: 137212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44524-1	WCSS-01	Total/NA	Solid	MA-EPH	

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-2

Client Sample ID: WCSS-01

Date Collected: 08/23/13 10:10

Date Received: 08/24/13 01:10

Lab Sample ID: 480-44524-1

Matrix: Solid

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546	RE		137023	09/03/13 09:54	CAM	TAL BUF
Total/NA	Fraction	MA EPH Frac	RE		137110	09/03/13 16:24	DLE	TAL BUF
Total/NA	Analysis	MA-EPH	RE	1	137142	09/04/13 05:10	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	137212	09/04/13 09:28	DGB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-2

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	10-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-09 *
Georgia	State Program	4	N/A	03-31-14
Georgia	State Program	4	956	03-31-09 *
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-01-09 *
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-08 *
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-09 *
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2337	11-17-13
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-13 *
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	09-30-13

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-2

Method	Method Description	Protocol	Laboratory
MA-EPH	Massachusetts - Extractable Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-44524-1	WCSS-01	Solid	08/23/13 10:10	08/24/13 01:10

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



CHAIN OF CUSTODY

PAGE 1 OF 1

WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: Woodard & Curran

Address: 95 Cedar St. Ste 100

Providence RI 02903

Phone: (401) 273-1007

Fax:

Email: anevey@woodardcurran.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.

(Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

Requesting QISkey and excel file with PDF report
CAM methods required.

Project Information

Project Name: Quincy-Interle

Project Location: Quincy MA

Project #: 226332

Project Manager: Andrew Hevey: woodardcurran.com

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

(for EPH)

Date Due:

Time:

24 hr for PCB

Date Rec'd in Lab:

ALPHA Job #:

Report Information - Data Deliverables

☐ FAX

☒ EMAIL

☐ Same as Client info

PO #:

☐ ADEX

☐ Add'l Deliverables

Regulatory Requirements/Report Limits

State /Fed Program

Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☐ Yes

☐ No

Are MCP Analytical Methods Required?

☐ Yes

☐ No

Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)

☐ Yes

☐ No

Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS
MASS DEPEAT (Standard)
PCBs with SEMU (24hr)

SAMPLE HANDLING

Filtration

☐ Done

☐ Not needed

☐ Lab to do

Preservation

☐ Lab to do

(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID
(Lab Use Only)

Sample ID

Collection
Date Time

Sample
Matrix

Sampler's
Initials

WLSS-01

8/23/13 10:10 SOIL

JP

X X

PLEASE ANSWER QUESTIONS ABOVE!

Container Type
Preservative

Relinquished By:

Julie P...
BTH

Date/Time

8/23/13 12:25
8/23/13 16:00

Received By:

Julie P...
TAL

Date/Time

8/23/13 12:25
8/23/13 16:00

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

IS YOUR PROJECT
MA MCP or CT RCP?

Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-44524-2

Login Number: 44524

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-44524-1

Client Project/Site: Quincy Inervale

Revision: 1

For:


Woodard & Curran Inc

95 Cedar St

Suite 100

Providence, Rhode Island 02903

Attn: Ms. Andrea Hevey



Authorized for release by:

10/11/2013 3:17:27 PM

Becky Mason, Project Manager II

(413)572-4000

becky.mason@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-1

Job ID: 480-44524-1

Laboratory: TestAmerica Buffalo

Narrative

Revised report: All soil units that were reporting as ug/Kg have been changed to mg/Kg per client request. This report replaces final report from 8/27/13.

Receipt

The sample was received on 8/24/2013 1:10 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9° C.

Rush PCB analysis only EPH will be reported on job 480-44524-2.

GC Semi VOA

Method 8082: The following sample were diluted to bring the concentration of target analytes within the calibration range: WCSS-01 (480-44524-1) . Elevated reporting limits (RLs) are provided.

Due to dilution required, per question G on the MassDEP Analytical Protocol Certification Form, the CAM reporting limits specified in this CAM protocol could not be achieved for some or all samples/analytes.

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

MassDEP Analytical Protocol Certification Form					
Laboratory Name: TestAmerica Buffalo		Project #: 480-44524-1			
Project Location: Quincy		RTN:			
This form provides certifications for the following data set: list Laboratory Sample ID Number(s): 480-44524-1[1]					
Matrices: <input type="checkbox"/> Groundwater/Surface Water <input checked="" type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
CAM Protocols (check all that apply below):					
8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	Mass DEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	6010 Metals CAM III C <input type="checkbox"/>	Mass DEP EPH CAM IV B <input type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input checked="" type="checkbox"/>	9014 Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Responses to Questions G, H and I below are required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
¹ All negative responses must be addressed in an attached laboratory narrative.					
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.					
Signature:		Position: Project Manager			
Printed Name: Becky Mason		Date: 8/27/13 12:16			
This form has been electronically signed and approved					

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-1

Client Sample ID: WCSS-01

Lab Sample ID: 480-44524-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	286		61.6	31.7	mg/Kg	1000	☼	8082	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-1

Client Sample ID: WCSS-01

Lab Sample ID: 480-44524-1

Date Collected: 08/23/13 10:10

Matrix: Solid

Date Received: 08/24/13 01:10

Percent Solids: 79.9

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<61.6		61.6	39.2	mg/Kg	☼	08/26/13 07:07	08/26/13 17:39	1000
PCB-1221	<61.6		61.6	29.9	mg/Kg	☼	08/26/13 07:07	08/26/13 17:39	1000
PCB-1232	<61.6		61.6	26.1	mg/Kg	☼	08/26/13 07:07	08/26/13 17:39	1000
PCB-1242	<61.6		61.6	24.3	mg/Kg	☼	08/26/13 07:07	08/26/13 17:39	1000
PCB-1248	<61.6		61.6	31.7	mg/Kg	☼	08/26/13 07:07	08/26/13 17:39	1000
PCB-1254	<61.6		61.6	31.7	mg/Kg	☼	08/26/13 07:07	08/26/13 17:39	1000
PCB-1260	286		61.6	31.7	mg/Kg	☼	08/26/13 07:07	08/26/13 17:39	1000
PCB-1262	<61.6		61.6	50.4	mg/Kg	☼	08/26/13 07:07	08/26/13 17:39	1000
PCB-1268	<61.6		61.6	26.1	mg/Kg	☼	08/26/13 07:07	08/26/13 17:39	1000

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	118734	X	30 - 150	08/26/13 07:07	08/26/13 17:39	1000
Tetrachloro-m-xylene	18061	X	30 - 150	08/26/13 07:07	08/26/13 17:39	1000
DCB Decachlorobiphenyl	40836	X	30 - 150	08/26/13 07:07	08/26/13 17:39	1000
DCB Decachlorobiphenyl	21217	X	30 - 150	08/26/13 07:07	08/26/13 17:39	1000

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (30-150)	TCX2 (30-150)	DCB1 (30-150)	DCB2 (30-150)
480-44524-1	WCSS-01	118734 X	18061 X	40836 X	21217 X
LCS 240-98858/4-A	Lab Control Sample	96	87	104	107
LCSD 240-98858/5-A	Lab Control Sample Dup	91	83	101	99
MB 240-98858/3-A	Method Blank	88	96	100	95

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Lab Sample ID: MB 240-98858/3-A

Matrix: Solid

Analysis Batch: 99004

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 98858

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0330		0.0330	0.0210	mg/Kg		08/26/13 07:07	08/26/13 17:55	1
PCB-1221	<0.0330		0.0330	0.0160	mg/Kg		08/26/13 07:07	08/26/13 17:55	1
PCB-1232	<0.0330		0.0330	0.0140	mg/Kg		08/26/13 07:07	08/26/13 17:55	1
PCB-1242	<0.0330		0.0330	0.0130	mg/Kg		08/26/13 07:07	08/26/13 17:55	1
PCB-1248	<0.0330		0.0330	0.0170	mg/Kg		08/26/13 07:07	08/26/13 17:55	1
PCB-1254	<0.0330		0.0330	0.0170	mg/Kg		08/26/13 07:07	08/26/13 17:55	1
PCB-1260	<0.0330		0.0330	0.0170	mg/Kg		08/26/13 07:07	08/26/13 17:55	1
PCB-1262	<0.0330		0.0330	0.0270	mg/Kg		08/26/13 07:07	08/26/13 17:55	1
PCB-1268	<0.0330		0.0330	0.0140	mg/Kg		08/26/13 07:07	08/26/13 17:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		30 - 150	08/26/13 07:07	08/26/13 17:55	1
Tetrachloro-m-xylene	96		30 - 150	08/26/13 07:07	08/26/13 17:55	1
DCB Decachlorobiphenyl	100		30 - 150	08/26/13 07:07	08/26/13 17:55	1
DCB Decachlorobiphenyl	95		30 - 150	08/26/13 07:07	08/26/13 17:55	1

Lab Sample ID: LCS 240-98858/4-A

Matrix: Solid

Analysis Batch: 99004

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 98858

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.333	0.2950		mg/Kg		89	40 - 140
PCB-1260	0.333	0.3387		mg/Kg		102	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	96		30 - 150
Tetrachloro-m-xylene	87		30 - 150
DCB Decachlorobiphenyl	104		30 - 150
DCB Decachlorobiphenyl	107		30 - 150

Lab Sample ID: LCSD 240-98858/5-A

Matrix: Solid

Analysis Batch: 99004

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 98858

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.333	0.2775		mg/Kg		83	40 - 140	6	30
PCB-1260	0.333	0.3297		mg/Kg		99	40 - 140	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	91		30 - 150
Tetrachloro-m-xylene	83		30 - 150
DCB Decachlorobiphenyl	101		30 - 150
DCB Decachlorobiphenyl	99		30 - 150

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-1

GC Semi VOA

Prep Batch: 98858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44524-1	WCSS-01	Total/NA	Solid	3540C	
LCS 240-98858/4-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-98858/5-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-98858/3-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 99004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44524-1	WCSS-01	Total/NA	Solid	8082	98858
LCS 240-98858/4-A	Lab Control Sample	Total/NA	Solid	8082	98858
LCSD 240-98858/5-A	Lab Control Sample Dup	Total/NA	Solid	8082	98858
MB 240-98858/3-A	Method Blank	Total/NA	Solid	8082	98858

General Chemistry

Analysis Batch: 135776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-44524-1	WCSS-01	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-1

Client Sample ID: WCSS-01
Date Collected: 08/23/13 10:10
Date Received: 08/24/13 01:10

Lab Sample ID: 480-44524-1
Matrix: Solid
Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			98858	08/26/13 07:07	CSC	TAL CAN
Total/NA	Analysis	8082		1000	99004	08/26/13 17:39	HMB	TAL CAN
Total/NA	Analysis	Moisture		1	135776	08/24/13 12:51	GTG	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	11-06-13
California	NELAP	9	1169CA	10-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	10-01-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13
Wisconsin	State Program	5	998310390	08-31-14

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-1

Laboratory: TestAmerica Canton (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-14

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL CAN
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-44524-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-44524-1	WCSS-01	Solid	08/23/13 10:10	08/24/13 01:10

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



CHAIN OF CUSTODY

PAGE 1 OF 1

WESTBORO, MA
TEL: 508-898-9220
FAX: 508-898-9193

MANSFIELD, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: Woodard & Curran

Address: 95 Cedar St. Ste 100

Providence RI 02903

Phone: (401) 273-1007

Fax:

Email: anevey@woodardcurran.com

☐ These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.

(Note: All CAM methods for inorganic analyses require MS every 20 soil samples)

Requesting QISKey and excel file with PDF report
CAM methods required.

Project Information

Project Name: Quincy-Interle

Project Location: Quincy MA

Project #: 226332

Project Manager: Andrew Hevey: woodardcurran.com

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

(for EPH)

Date Due:

Time:

24 hr for PCB

Date Rec'd in Lab:

ALPHA Job #:

Report Information - Data Deliverables

☐ FAX

☒ EMAIL

☐ Same as Client info

PO #:

☐ ADEX

☐ Add'l Deliverables

Regulatory Requirements/Report Limits

State /Fed Program

Criteria

MA MCP PRESUMPTIVE CERTAINTY --- CT REASONABLE CONFIDENCE PROTO

☐ Yes

☐ No

Are MCP Analytical Methods Required?

☐ Yes

☐ No

Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)

☐ Yes

☐ No

Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS
MASS DEPEAT (Standard)
PCBs with SDG 125 (24 hr)

SAMPLE HANDLING

Filtration

☐ Done

☐ Not needed

☐ Lab to do

Preservation

☐ Lab to do

(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID
(Lab Use Only)

Sample ID

Collection
Date Time

Sample
Matrix

Sampler's
Initials

WLSS-01

8/23/13 10:10 SOIL

JP

X X

3.9H!

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT
MA MCP or CT RCP?

Container Type
Preservative

Relinquished By:

Julie P...
BTH

Date/Time

8/23/13 12:25
8/23/13 16:00

Received By:

Julie P...
TAL

Date/Time

8/23/125
2:45:15
CHD

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-44524-1

Login Number: 44524

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-45973-1

Client Project/Site: Quincy Inervale

For:

Woodard & Curran Inc

95 Cedar St

Suite 100

Providence, Rhode Island 02903

Attn: Ms. Andrea Hevey



Authorized for release by:

9/24/2013 1:35:25 PM

Becky Mason, Project Manager II

becky.mason@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

Qualifiers

Metals

Qualifier	Qualifier Description
F	MS/MSD Recovery and/or RPD exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
F	MS/MSD Recovery and/or RPD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

Job ID: 480-45973-1

Laboratory: TestAmerica Buffalo

Narrative

Receipt

The samples were received on 9/16/2013 3:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9° C.

Metals

Method 6010: The Serial Dilution (480-45973-1 SD) in batch 480-139756, exhibited a result outside the quality control limits for total chromium. However, the Post Digestion Spike was compliant so no corrective action was necessary

Method 6010: The Matrix Spike Duplicate (480-45973-1 MSD) recovery for total chromium in batch 480-139756 was outside control limits. Non-homogeneity is suspected. The associated Laboratory Control Sample (LCS) met acceptance criteria, therefore no corrective action was necessary.

No other analytical or quality issues were noted.

General Chemistry

Method(7196A: The matrix soluble spike, insoluble spike and post digestion spike (MSS/MSI/PDS) recoveries for sample 480-45973-C-2 and the matrix soluble spike, and post digestion spike (MSS/PDS) recoveries for sample 480-45973-C-3 for batch 84254 were outside of control limits. The associated laboratory control Standard reference material and laboratory control Standard reference material duplicate standard (LCSSRM/LCSDSRM) analysis data demonstrate that the analytical system was operating in control; therefore, this condition is most likely due to a matrix interference. An Oxidation Reduction Potential (ORP) test was performed for the samples and reducing conditions were found to exist.

No other analytical or quality issues were noted.

MassDEP Analytical Protocol Certification Form					
Laboratory Name: TestAmerica Buffalo		Project #: 480-45973-1			
Project Location: Quincy		RTN:			
This form provides certifications for the following data set: list Laboratory Sample ID Number(s): 480-45973-1[1-3]					
Matrices: <input type="checkbox"/> Groundwater/Surface Water <input checked="" type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
CAM Protocols (check all that apply below):					
8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	Mass DEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input checked="" type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	6010 Metals CAM III C <input type="checkbox"/>	Mass DEP EPH CAM IV B <input type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input type="checkbox"/>	9014 Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Responses to Questions G, H and I below are required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
¹ All negative responses must be addressed in an attached laboratory narrative.					
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.					
Signature:		Position: Project Manager			
Printed Name: Becky Mason		Date: 9/24/13 13:27			
This form has been electronically signed and approved					

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

Client Sample ID: WCSS-12-(0-0.25)

Lab Sample ID: 480-45973-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	67.5		0.537	0.215	mg/Kg	1	☼	6010	Total/NA
Chromium (hexavalent)	1.74		0.434	0.109	mg/Kg	1	☼	7196A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	7.48		1.00	1.00	SU	1	—	9045C	Soluble
Oxidation Reduction Potential	138		0.0100	0.0100	millivolts	1		SM 2580B	Soluble

Client Sample ID: WCSS-37-(0-0.25)

Lab Sample ID: 480-45973-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	67.4		0.494	0.198	mg/Kg	1	☼	6010	Total/NA
Chromium (hexavalent)	4.67		0.428	0.107	mg/Kg	1	☼	7196A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	8.29		1.00	1.00	SU	1	—	9045C	Soluble
Oxidation Reduction Potential	62.0		0.0100	0.0100	millivolts	1		SM 2580B	Soluble

Client Sample ID: WCSS-42-(0-0.25)

Lab Sample ID: 480-45973-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	29.1		0.582	0.233	mg/Kg	1	☼	6010	Total/NA
Chromium (hexavalent)	5.71		0.424	0.106	mg/Kg	1	☼	7196A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
pH	7.80		1.00	1.00	SU	1	—	9045C	Soluble
Oxidation Reduction Potential	59.0		0.0100	0.0100	millivolts	1		SM 2580B	Soluble

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45973-1

Client Sample ID: WCSS-12-(0-0.25)

Lab Sample ID: 480-45973-1

Date Collected: 09/16/13 12:05

Matrix: Solid

Date Received: 09/16/13 15:00

Percent Solids: 94.1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	67.5		0.537	0.215	mg/Kg	☼	09/18/13 13:55	09/19/13 16:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium (hexavalent)	1.74		0.434	0.109	mg/Kg	☼	09/19/13 08:29	09/20/13 14:57	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.48		1.00	1.00	SU	—		09/17/13 09:14	1
Oxidation Reduction Potential	138		0.0100	0.0100	millivolts			09/17/13 09:14	1

Client Sample ID: WCSS-37-(0-0.25)

Lab Sample ID: 480-45973-2

Date Collected: 09/16/13 10:20

Matrix: Solid

Date Received: 09/16/13 15:00

Percent Solids: 93.1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	67.4		0.494	0.198	mg/Kg	☼	09/18/13 13:55	09/19/13 17:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium (hexavalent)	4.67		0.428	0.107	mg/Kg	☼	09/19/13 08:30	09/20/13 14:52	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.29		1.00	1.00	SU	—		09/17/13 09:24	1
Oxidation Reduction Potential	62.0		0.0100	0.0100	millivolts			09/17/13 09:24	1

Client Sample ID: WCSS-42-(0-0.25)

Lab Sample ID: 480-45973-3

Date Collected: 09/16/13 10:10

Matrix: Solid

Date Received: 09/16/13 15:00

Percent Solids: 94.8

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	29.1		0.582	0.233	mg/Kg	☼	09/18/13 13:55	09/19/13 17:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium (hexavalent)	5.71		0.424	0.106	mg/Kg	☼	09/19/13 08:29	09/20/13 14:45	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.80		1.00	1.00	SU	—		09/17/13 09:29	1
Oxidation Reduction Potential	59.0		0.0100	0.0100	millivolts			09/17/13 09:29	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-139756/1-A

Matrix: Solid

Analysis Batch: 140198

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139756

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.471		0.471	0.188	mg/Kg		09/18/13 13:55	09/19/13 16:29	1

Lab Sample ID: LCDSRM 480-139756/3-A LCDSRM

Matrix: Solid

Analysis Batch: 140198

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139756

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	125	119.0		mg/Kg		95.1	69.8 - 129.6	1	20

Lab Sample ID: LCSSRM 480-139756/2-A

Matrix: Solid

Analysis Batch: 140198

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139756

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	125	117.9		mg/Kg		94.2	69.8 - 129.6		

Lab Sample ID: 480-45973-1 MS

Matrix: Solid

Analysis Batch: 140198

Client Sample ID: WCSS-12-(0-0.25)

Prep Type: Total/NA

Prep Batch: 139756

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	67.5		44.0	104.5		mg/Kg	☼	84	75 - 125		

Lab Sample ID: 480-45973-1 MSD

Matrix: Solid

Analysis Batch: 140198

Client Sample ID: WCSS-12-(0-0.25)

Prep Type: Total/NA

Prep Batch: 139756

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	67.5		45.4	88.29	F	mg/Kg	☼	46	75 - 125	17	35

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 180-84042/1-A

Matrix: Solid

Analysis Batch: 84254

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84042

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium (hexavalent)	<0.400		0.400	0.100	mg/Kg		09/19/13 08:29	09/20/13 14:42	1

Lab Sample ID: LCDSRM 180-84042/3-A LCDSRM

Matrix: Solid

Analysis Batch: 84254

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84042

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium (hexavalent)	147	123.6		mg/Kg		84.1	31.9 - 152.4	1	30

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45973-1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCSSRM 180-84042/2-A

Matrix: Solid

Analysis Batch: 84254

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84042

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium (hexavalent)	147	122.5		mg/Kg		83.3	31.9 - 152.4

Lab Sample ID: 480-45973-2 MSI

Matrix: Solid

Analysis Batch: 84254

Client Sample ID: WCSS-37-(0-0.25)

Prep Type: Total/NA

Prep Batch: 84042

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium (hexavalent)	4.67		767	656.4		mg/Kg	☼	85	75 - 125

Lab Sample ID: 480-45973-2 MSS

Matrix: Solid

Analysis Batch: 84254

Client Sample ID: WCSS-37-(0-0.25)

Prep Type: Total/NA

Prep Batch: 84042

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium (hexavalent)	4.67		21.3	11.76	F	mg/Kg	☼	33	75 - 125

Lab Sample ID: 480-45973-3 MSI

Matrix: Solid

Analysis Batch: 84254

Client Sample ID: WCSS-42-(0-0.25)

Prep Type: Total/NA

Prep Batch: 84042

Analyte	Sample Result	Sample Qualifier	Spike Added	MSI Result	MSI Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium (hexavalent)	5.71		732	245.5	F	mg/Kg	☼	33	75 - 125

Lab Sample ID: 480-45973-3 MSS

Matrix: Solid

Analysis Batch: 84254

Client Sample ID: WCSS-42-(0-0.25)

Prep Type: Total/NA

Prep Batch: 84042

Analyte	Sample Result	Sample Qualifier	Spike Added	MSS Result	MSS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium (hexavalent)	5.71		21.4	4.726	F	mg/Kg	☼	-5	75 - 125

Lab Sample ID: 480-45973-2 DU

Matrix: Solid

Analysis Batch: 84254

Client Sample ID: WCSS-37-(0-0.25)

Prep Type: Total/NA

Prep Batch: 84042

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Chromium (hexavalent)	4.67		4.681		mg/Kg	☼	0.3	35

Lab Sample ID: 480-45973-3 DU

Matrix: Solid

Analysis Batch: 84254

Client Sample ID: WCSS-42-(0-0.25)

Prep Type: Total/NA

Prep Batch: 84042

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Chromium (hexavalent)	5.71		5.914		mg/Kg	☼	4	35

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

Method: 9045C - pH

Lab Sample ID: LCS 360-98282/1-A
Matrix: Solid
Analysis Batch: 98285

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	6.00	5.980		SU		100	90 - 110

Lab Sample ID: 480-45973-1 DU
Matrix: Solid
Analysis Batch: 98285

Client Sample ID: WCSS-12-(0-0.25)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.48		7.540		SU		0.8	10.0

Method: SM 2580B - Reduction-Oxidation (REDOX) Potential

Lab Sample ID: LCS 360-98283/1-A
Matrix: Solid
Analysis Batch: 98284

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oxidation Reduction Potential	475	476.0		millivolts		100	85 - 115

Lab Sample ID: 480-45973-1 DU
Matrix: Solid
Analysis Batch: 98284

Client Sample ID: WCSS-12-(0-0.25)
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Oxidation Reduction Potential	138		132.0		millivolts		4	20

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

Metals

Prep Batch: 139756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45973-1	WCSS-12-(0-0.25)	Total/NA	Solid	3050B	
480-45973-1 MS	WCSS-12-(0-0.25)	Total/NA	Solid	3050B	
480-45973-1 MSD	WCSS-12-(0-0.25)	Total/NA	Solid	3050B	
480-45973-2	WCSS-37-(0-0.25)	Total/NA	Solid	3050B	
480-45973-3	WCSS-42-(0-0.25)	Total/NA	Solid	3050B	
LCDSRM 480-139756/3-A LCDSE	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-139756/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-139756/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 140198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45973-1	WCSS-12-(0-0.25)	Total/NA	Solid	6010	139756
480-45973-1 MS	WCSS-12-(0-0.25)	Total/NA	Solid	6010	139756
480-45973-1 MSD	WCSS-12-(0-0.25)	Total/NA	Solid	6010	139756
480-45973-2	WCSS-37-(0-0.25)	Total/NA	Solid	6010	139756
480-45973-3	WCSS-42-(0-0.25)	Total/NA	Solid	6010	139756
LCDSRM 480-139756/3-A LCDSE	Lab Control Sample Dup	Total/NA	Solid	6010	139756
LCSSRM 480-139756/2-A	Lab Control Sample	Total/NA	Solid	6010	139756
MB 480-139756/1-A	Method Blank	Total/NA	Solid	6010	139756

General Chemistry

Prep Batch: 84042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45973-1	WCSS-12-(0-0.25)	Total/NA	Solid	3060A	
480-45973-2	WCSS-37-(0-0.25)	Total/NA	Solid	3060A	
480-45973-2 DU	WCSS-37-(0-0.25)	Total/NA	Solid	3060A	
480-45973-2 MSI	WCSS-37-(0-0.25)	Total/NA	Solid	3060A	
480-45973-2 MSS	WCSS-37-(0-0.25)	Total/NA	Solid	3060A	
480-45973-3	WCSS-42-(0-0.25)	Total/NA	Solid	3060A	
480-45973-3 DU	WCSS-42-(0-0.25)	Total/NA	Solid	3060A	
480-45973-3 MSI	WCSS-42-(0-0.25)	Total/NA	Solid	3060A	
480-45973-3 MSS	WCSS-42-(0-0.25)	Total/NA	Solid	3060A	
LCDSRM 180-84042/3-A LCDSE	Lab Control Sample Dup	Total/NA	Solid	3060A	
LCSSRM 180-84042/2-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 180-84042/1-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 84254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45973-1	WCSS-12-(0-0.25)	Total/NA	Solid	7196A	84042
480-45973-2	WCSS-37-(0-0.25)	Total/NA	Solid	7196A	84042
480-45973-2 DU	WCSS-37-(0-0.25)	Total/NA	Solid	7196A	84042
480-45973-2 MSI	WCSS-37-(0-0.25)	Total/NA	Solid	7196A	84042
480-45973-2 MSS	WCSS-37-(0-0.25)	Total/NA	Solid	7196A	84042
480-45973-3	WCSS-42-(0-0.25)	Total/NA	Solid	7196A	84042
480-45973-3 DU	WCSS-42-(0-0.25)	Total/NA	Solid	7196A	84042
480-45973-3 MSI	WCSS-42-(0-0.25)	Total/NA	Solid	7196A	84042
480-45973-3 MSS	WCSS-42-(0-0.25)	Total/NA	Solid	7196A	84042
LCDSRM 180-84042/3-A LCDSE	Lab Control Sample Dup	Total/NA	Solid	7196A	84042
LCSSRM 180-84042/2-A	Lab Control Sample	Total/NA	Solid	7196A	84042

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

General Chemistry (Continued)

Analysis Batch: 84254 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-84042/1-A	Method Blank	Total/NA	Solid	7196A	84042

Leach Batch: 98282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45973-1	WCSS-12-(0-0.25)	Soluble	Solid	DI Leach	
480-45973-1 DU	WCSS-12-(0-0.25)	Soluble	Solid	DI Leach	
480-45973-2	WCSS-37-(0-0.25)	Soluble	Solid	DI Leach	
480-45973-3	WCSS-42-(0-0.25)	Soluble	Solid	DI Leach	
LCS 360-98282/1-A	Lab Control Sample	Soluble	Solid	DI Leach	

Leach Batch: 98283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45973-1	WCSS-12-(0-0.25)	Soluble	Solid	DI Leach	
480-45973-1 DU	WCSS-12-(0-0.25)	Soluble	Solid	DI Leach	
480-45973-2	WCSS-37-(0-0.25)	Soluble	Solid	DI Leach	
480-45973-3	WCSS-42-(0-0.25)	Soluble	Solid	DI Leach	
LCS 360-98283/1-A	Lab Control Sample	Soluble	Solid	DI Leach	

Analysis Batch: 98284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45973-1	WCSS-12-(0-0.25)	Soluble	Solid	SM 2580B	98283
480-45973-1 DU	WCSS-12-(0-0.25)	Soluble	Solid	SM 2580B	98283
480-45973-2	WCSS-37-(0-0.25)	Soluble	Solid	SM 2580B	98283
480-45973-3	WCSS-42-(0-0.25)	Soluble	Solid	SM 2580B	98283
LCS 360-98283/1-A	Lab Control Sample	Soluble	Solid	SM 2580B	98283

Analysis Batch: 98285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45973-1	WCSS-12-(0-0.25)	Soluble	Solid	9045C	98282
480-45973-1 DU	WCSS-12-(0-0.25)	Soluble	Solid	9045C	98282
480-45973-2	WCSS-37-(0-0.25)	Soluble	Solid	9045C	98282
480-45973-3	WCSS-42-(0-0.25)	Soluble	Solid	9045C	98282
LCS 360-98282/1-A	Lab Control Sample	Soluble	Solid	9045C	98282

Analysis Batch: 139842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45973-1	WCSS-12-(0-0.25)	Total/NA	Solid	Moisture	
480-45973-2	WCSS-37-(0-0.25)	Total/NA	Solid	Moisture	
480-45973-3	WCSS-42-(0-0.25)	Total/NA	Solid	Moisture	

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

Client Sample ID: WCSS-12-(0-0.25)

Date Collected: 09/16/13 12:05

Date Received: 09/16/13 15:00

Lab Sample ID: 480-45973-1

Matrix: Solid

Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			139756	09/18/13 13:55	NMD2	TAL BUF
Total/NA	Analysis	6010		1	140198	09/19/13 16:50	LMH	TAL BUF
Total/NA	Prep	3060A			84042	09/19/13 08:29	HRA	TAL PIT
Total/NA	Analysis	7196A		1	84254	09/20/13 14:57	MTW	TAL PIT
Soluble	Leach	DI Leach			98283	09/17/13 08:10	GRB	TAL WFD
Soluble	Analysis	SM 2580B		1	98284	09/17/13 09:14	GRB	TAL WFD
Soluble	Leach	DI Leach			98282	09/17/13 08:10	GRB	TAL WFD
Soluble	Analysis	9045C		1	98285	09/17/13 09:14	GRB	TAL WFD
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-37-(0-0.25)

Date Collected: 09/16/13 10:20

Date Received: 09/16/13 15:00

Lab Sample ID: 480-45973-2

Matrix: Solid

Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			139756	09/18/13 13:55	NMD2	TAL BUF
Total/NA	Analysis	6010		1	140198	09/19/13 17:02	LMH	TAL BUF
Total/NA	Prep	3060A			84042	09/19/13 08:30	HRA	TAL PIT
Total/NA	Analysis	7196A		1	84254	09/20/13 14:52	MTW	TAL PIT
Soluble	Leach	DI Leach			98283	09/17/13 08:10	GRB	TAL WFD
Soluble	Analysis	SM 2580B		1	98284	09/17/13 09:24	GRB	TAL WFD
Soluble	Leach	DI Leach			98282	09/17/13 08:10	GRB	TAL WFD
Soluble	Analysis	9045C		1	98285	09/17/13 09:24	GRB	TAL WFD
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-42-(0-0.25)

Date Collected: 09/16/13 10:10

Date Received: 09/16/13 15:00

Lab Sample ID: 480-45973-3

Matrix: Solid

Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			139756	09/18/13 13:55	NMD2	TAL BUF
Total/NA	Analysis	6010		1	140198	09/19/13 17:05	LMH	TAL BUF
Total/NA	Prep	3060A			84042	09/19/13 08:29	HRA	TAL PIT
Total/NA	Analysis	7196A		1	84254	09/20/13 14:45	MTW	TAL PIT
Soluble	Leach	DI Leach			98283	09/17/13 08:10	GRB	TAL WFD
Soluble	Analysis	SM 2580B		1	98284	09/17/13 09:29	GRB	TAL WFD
Soluble	Leach	DI Leach			98282	09/17/13 08:10	GRB	TAL WFD
Soluble	Analysis	9045C		1	98285	09/17/13 09:29	GRB	TAL WFD
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

Laboratory References:

- TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
- TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058
- TAL WFD = TestAmerica Westfield, Westfield Executive Park, 53 Southampton Road, Westfield, MA 01085, TEL (413)572-4000

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Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	10-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-14

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-14
California	NELAP	9	4224CA	03-31-14
Connecticut	State Program	1	PH-0688	09-30-14
Florida	NELAP	4	E871008	06-30-14
Illinois	NELAP	5	002602	06-30-14
Kansas	NELAP	7	E-10350	01-31-14
L-A-B	DoD ELAP		L2314	07-16-16
Louisiana	NELAP	6	04041	06-30-13 *
New Hampshire	NELAP	1	203011	04-05-14
New Jersey	NELAP	2	PA005	06-30-14
New York	NELAP	2	11182	04-01-14
North Carolina DENR	State Program	4	434	12-31-13
Pennsylvania	NELAP	3	02-00416	04-30-14
South Carolina	State Program	4	89014	04-30-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

Laboratory: TestAmerica Pittsburgh (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
US Fish & Wildlife	Federal		LE94312A-1	11-30-14
USDA	Federal		P330-10-00139	05-23-16
Utah	NELAP	8	STLP	04-30-14
Virginia	NELAP	3	460189	09-14-14
West Virginia DEP	State Program	3	142	01-31-14
Wisconsin	State Program	5	998027800	08-31-14

Laboratory: TestAmerica Westfield

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0494	09-30-14
Massachusetts	State Program	1	M-MA014	06-30-14
New Hampshire	NELAP	1	2539	08-08-14

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

Method	Method Description	Protocol	Laboratory
6010	Metals (ICP)	SW846	TAL BUF
7196A	Chromium, Hexavalent	SW846	TAL PIT
9045C	pH	SW846	TAL WFD
Moisture	Percent Moisture	EPA	TAL BUF
SM 2580B	Reduction-Oxidation (REDOX) Potential	SM	TAL WFD

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

TAL WFD = TestAmerica Westfield, Westfield Executive Park, 53 Southampton Road, Westfield, MA 01085, TEL (413)572-4000

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45973-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-45973-1	WCSS-12-(0-0.25)	Solid	09/16/13 12:05	09/16/13 15:00
480-45973-2	WCSS-37-(0-0.25)	Solid	09/16/13 10:20	09/16/13 15:00
480-45973-3	WCSS-42-(0-0.25)	Solid	09/16/13 10:10	09/16/13 15:00

Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-45973-1

Login Number: 45973

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-45973-1

Login Number: 45973

List Number: 1

Creator: Neri, Tom

List Source: TestAmerica Pittsburgh

List Creation: 09/18/13 05:47 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-45973-1

Login Number: 45973

List Number: 1

Creator: Emerich, Rich W

List Source: TestAmerica Westfield

List Creation: 09/18/13 02:23 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-45969-2

Client Project/Site: Quincy Inervale

For:

Woodard & Curran Inc

95 Cedar St

Suite 100

Providence, Rhode Island 02903

Attn: Ms. Andrea Hevey



Authorized for release by:

9/27/2013 4:39:24 PM

Becky Mason, Project Manager II

(413)572-4000

becky.mason@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Job ID: 480-45969-2

Laboratory: TestAmerica Buffalo

Narrative

Receipt

The samples were received on 9/18/2013 1:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.1° C, 3.6° C and 3.7° C.

GC Semi VOA

Method 8082: The following samples appear to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: WCSS-29-(0-0.25) (480-45969-18), WCSS-32-(0-0.25) (480-45969-21), WCSS-33-(0-0.25) (480-45969-22), WCSS-34-(0-0.25) (480-45969-23), WCSS-35-(0-0.25) (480-45969-24), WCSS-36-(0-0.25) (480-45969-25), WCSS-44-(0-0.25) (480-45969-31), WCSS-918-(0-0.25) (480-45969-36), WCSS-935-(0-0.25) (480-45969-39). The samples have been quantified and reported as a mixture of Aroclors 1254 and 1260. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

Method 8082: The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: WCSS-40-(0-0.25) (480-45969-28). Lot # S65830

Method 8082: The following samples appears to contain polychlorinated biphenyls (PCBs); however, due to weathering or other environmental processes, the PCBs in the sample do not closely match any of the laboratory's Aroclor standards used for instrument calibration: WCSS-11-(0-0.25) (480-45969-1), WCSS-18-(0-0.25) (480-45969-6), WCSS-24-(0-0.25) (480-45969-14), WCSS-26-(0-0.25) (480-45969-15), WCSS-27-(0-0.25) (480-45969-16), WCSS-44-(0-0.25) (480-45969-31), WCSS-918-(0-0.25) (480-45969-36), WCSS-935-(0-0.25) (480-45969-39). The samples have been quantified and reported as a mixture of Aroclors 1254 and 1260. Due to the poor match with the Aroclor standard(s), there is increased qualitative and quantitative uncertainty associated with this result.

Method 8082: The following sample was diluted due to color: WCSS-17-(0-0.25) (480-45969-7). Elevated reporting limits (RL) are provided.

Method 8082: One surrogate failed high for the LCS on the confirmation column. All LCS/LCSD criteria passed. No re-extract was required.

No other analytical or quality issues were noted.

General Chemistry

No analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

MassDEP Analytical Protocol Certification Form					
Laboratory Name: TestAmerica Buffalo		Project #: 480-45969-2			
Project Location: Quincy		RTN:			
This form provides certifications for the following data set: list Laboratory Sample ID Number(s): 480-45969-2[1-2,6-19,21-25,28-32,36-37,39]					
Matrices: <input type="checkbox"/> Groundwater/Surface Water <input checked="" type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
CAM Protocols (check all that apply below):					
8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	Mass DEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	6010 Metals CAM III C <input type="checkbox"/>	Mass DEP EPH CAM IV B <input type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input checked="" type="checkbox"/>	9014 Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Responses to Questions G, H and I below are required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
¹ All negative responses must be addressed in an attached laboratory narrative.					
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.					
Signature:		Position: Project Manager			
Printed Name: Becky Mason		Date: 9/27/13 16:37			
This form has been electronically signed and approved					

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-11-(0-0.25)

Lab Sample ID: 480-45969-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	3.77		0.727	0.374	mg/Kg	20	☼	8082	Total/NA

Client Sample ID: WCSS-13-(0-0.25)

Lab Sample ID: 480-45969-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	1.13		0.0746	0.0384	mg/Kg	2	☼	8082	Total/NA

Client Sample ID: WCSS-18-(0-0.25)

Lab Sample ID: 480-45969-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	1.40		0.181	0.0931	mg/Kg	5	☼	8082	Total/NA

Client Sample ID: WCSS-17-(0-0.25)

Lab Sample ID: 480-45969-7

No Detections.

Client Sample ID: WCSS-19-(0-0.25)

Lab Sample ID: 480-45969-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1242	0.100	J	0.177	0.0699	mg/Kg	5	☼	8082	Total/NA
PCB-1260	0.529		0.177	0.0914	mg/Kg	5	☼	8082	Total/NA

Client Sample ID: WCSS-20-(0-0.25)

Lab Sample ID: 480-45969-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.997		0.189	0.0971	mg/Kg	5	☼	8082	Total/NA

Client Sample ID: WCSS-21-(0-0.25)

Lab Sample ID: 480-45969-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	2.03		0.171	0.0883	mg/Kg	5	☼	8082	Total/NA

Client Sample ID: WCSS-22-(0-0.25)

Lab Sample ID: 480-45969-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	6.39		0.705	0.363	mg/Kg	20	☼	8082	Total/NA

Client Sample ID: WCSS-23-(0-0.25)

Lab Sample ID: 480-45969-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	5.29		0.350	0.180	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCSS-25-(0-0.25)

Lab Sample ID: 480-45969-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	164		20.2	10.4	mg/Kg	500	☼	8082	Total/NA

Client Sample ID: WCSS-24-(0-0.25)

Lab Sample ID: 480-45969-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	5.76		0.734	0.378	mg/Kg	20	☼	8082	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-26-(0-0.25)

Lab Sample ID: 480-45969-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.287		0.0349	0.0180	mg/Kg	1	☼	8082	Total/NA

Client Sample ID: WCSS-27-(0-0.25)

Lab Sample ID: 480-45969-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.813		0.0744	0.0383	mg/Kg	2	☼	8082	Total/NA

Client Sample ID: WCSS-28-(0-0.25)

Lab Sample ID: 480-45969-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.133		0.0698	0.0360	mg/Kg	2	☼	8082	Total/NA

Client Sample ID: WCSS-29-(0-0.25)

Lab Sample ID: 480-45969-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	13.8		1.77	0.912	mg/Kg	50	☼	8082	Total/NA

Client Sample ID: WCSS-30-(0-0.25)

Lab Sample ID: 480-45969-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1254	0.483		0.357	0.184	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCSS-32-(0-0.25)

Lab Sample ID: 480-45969-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	0.309		0.0352	0.0181	mg/Kg	1	☼	8082	Total/NA

Client Sample ID: WCSS-33-(0-0.25)

Lab Sample ID: 480-45969-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	5.03		0.390	0.201	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCSS-34-(0-0.25)

Lab Sample ID: 480-45969-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	5.31		0.391	0.202	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCSS-35-(0-0.25)

Lab Sample ID: 480-45969-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	1.41		0.176	0.0907	mg/Kg	5	☼	8082	Total/NA

Client Sample ID: WCSS-36-(0-0.25)

Lab Sample ID: 480-45969-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	3.30		0.361	0.186	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCSS-40-(0-0.25)

Lab Sample ID: 480-45969-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260									

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-40-(0-0.25) (Continued)

Lab Sample ID: 480-45969-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	3.05		0.347	0.179	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCSS-41-(0-0.25)

Lab Sample ID: 480-45969-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	33.4		3.68	1.90	mg/Kg	100	☼	8082	Total/NA

Client Sample ID: WCSS-43-(0-0.25)

Lab Sample ID: 480-45969-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1260	173		16.7	8.62	mg/Kg	500	☼	8082	Total/NA

Client Sample ID: WCSS-44-(0-0.25)

Lab Sample ID: 480-45969-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1242	1.74		0.670	0.264	mg/Kg	20	☼	8082	Total/NA
PCB-1254	8.32		0.670	0.345	mg/Kg	20	☼	8082	Total/NA

Client Sample ID: WCSS-45-(0-0.25)

Lab Sample ID: 480-45969-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1242	0.189	J	0.375	0.148	mg/Kg	10	☼	8082	Total/NA
PCB-1260	5.62		0.375	0.193	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCSS-918-(0-0.25)

Lab Sample ID: 480-45969-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1242	0.241	J	0.370	0.146	mg/Kg	10	☼	8082	Total/NA
PCB-1260	2.25		0.370	0.191	mg/Kg	10	☼	8082	Total/NA

Client Sample ID: WCEB-27-(0-0.25)

Lab Sample ID: 480-45969-37

No Detections.

Client Sample ID: WCSS-935-(0-0.25)

Lab Sample ID: 480-45969-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1242	0.138	J	0.174	0.0685	mg/Kg	5	☼	8082	Total/NA
PCB-1260	1.27		0.174	0.0895	mg/Kg	5	☼	8082	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-11-(0-0.25)

Lab Sample ID: 480-45969-1

Date Collected: 09/16/13 12:00

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 90.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.727		0.727	0.463	mg/Kg	✱	09/20/13 10:20	09/24/13 03:33	20
PCB-1221	<0.727		0.727	0.352	mg/Kg	✱	09/20/13 10:20	09/24/13 03:33	20
PCB-1232	<0.727		0.727	0.308	mg/Kg	✱	09/20/13 10:20	09/24/13 03:33	20
PCB-1242	<0.727		0.727	0.286	mg/Kg	✱	09/20/13 10:20	09/24/13 03:33	20
PCB-1248	<0.727		0.727	0.374	mg/Kg	✱	09/20/13 10:20	09/24/13 03:33	20
PCB-1254	<0.727		0.727	0.374	mg/Kg	✱	09/20/13 10:20	09/24/13 03:33	20
PCB-1260	3.77		0.727	0.374	mg/Kg	✱	09/20/13 10:20	09/24/13 03:33	20
PCB-1262	<0.727		0.727	0.595	mg/Kg	✱	09/20/13 10:20	09/24/13 03:33	20
PCB-1268	<0.727		0.727	0.308	mg/Kg	✱	09/20/13 10:20	09/24/13 03:33	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	09/20/13 10:20	09/24/13 03:33	20
Tetrachloro-m-xylene	0	X	30 - 150	09/20/13 10:20	09/24/13 03:33	20
DCB Decachlorobiphenyl	406	X	30 - 150	09/20/13 10:20	09/24/13 03:33	20
DCB Decachlorobiphenyl	287	X	30 - 150	09/20/13 10:20	09/24/13 03:33	20

Client Sample ID: WCSS-13-(0-0.25)

Lab Sample ID: 480-45969-2

Date Collected: 09/16/13 11:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0746		0.0746	0.0475	mg/Kg	✱	09/20/13 10:20	09/24/13 03:49	2
PCB-1221	<0.0746		0.0746	0.0362	mg/Kg	✱	09/20/13 10:20	09/24/13 03:49	2
PCB-1232	<0.0746		0.0746	0.0316	mg/Kg	✱	09/20/13 10:20	09/24/13 03:49	2
PCB-1242	<0.0746		0.0746	0.0294	mg/Kg	✱	09/20/13 10:20	09/24/13 03:49	2
PCB-1248	<0.0746		0.0746	0.0384	mg/Kg	✱	09/20/13 10:20	09/24/13 03:49	2
PCB-1254	<0.0746		0.0746	0.0384	mg/Kg	✱	09/20/13 10:20	09/24/13 03:49	2
PCB-1260	1.13		0.0746	0.0384	mg/Kg	✱	09/20/13 10:20	09/24/13 03:49	2
PCB-1262	<0.0746		0.0746	0.0610	mg/Kg	✱	09/20/13 10:20	09/24/13 03:49	2
PCB-1268	<0.0746		0.0746	0.0316	mg/Kg	✱	09/20/13 10:20	09/24/13 03:49	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	79		30 - 150	09/20/13 10:20	09/24/13 03:49	2
Tetrachloro-m-xylene	75		30 - 150	09/20/13 10:20	09/24/13 03:49	2
DCB Decachlorobiphenyl	76		30 - 150	09/20/13 10:20	09/24/13 03:49	2
DCB Decachlorobiphenyl	73		30 - 150	09/20/13 10:20	09/24/13 03:49	2

Client Sample ID: WCSS-18-(0-0.25)

Lab Sample ID: 480-45969-6

Date Collected: 09/16/13 11:00

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 91.7

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.181		0.181	0.115	mg/Kg	✱	09/20/13 10:20	09/24/13 04:04	5
PCB-1221	<0.181		0.181	0.0876	mg/Kg	✱	09/20/13 10:20	09/24/13 04:04	5
PCB-1232	<0.181		0.181	0.0767	mg/Kg	✱	09/20/13 10:20	09/24/13 04:04	5
PCB-1242	<0.181		0.181	0.0712	mg/Kg	✱	09/20/13 10:20	09/24/13 04:04	5
PCB-1248	<0.181		0.181	0.0931	mg/Kg	✱	09/20/13 10:20	09/24/13 04:04	5
PCB-1254	<0.181		0.181	0.0931	mg/Kg	✱	09/20/13 10:20	09/24/13 04:04	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-18-(0-0.25)

Lab Sample ID: 480-45969-6

Date Collected: 09/16/13 11:00

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 91.7

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	1.40		0.181	0.0931	mg/Kg	☼	09/20/13 10:20	09/24/13 04:04	5
PCB-1262	<0.181		0.181	0.148	mg/Kg	☼	09/20/13 10:20	09/24/13 04:04	5
PCB-1268	<0.181		0.181	0.0767	mg/Kg	☼	09/20/13 10:20	09/24/13 04:04	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	94		30 - 150				09/20/13 10:20	09/24/13 04:04	5
Tetrachloro-m-xylene	91		30 - 150				09/20/13 10:20	09/24/13 04:04	5
DCB Decachlorobiphenyl	168	X	30 - 150				09/20/13 10:20	09/24/13 04:04	5
DCB Decachlorobiphenyl	145		30 - 150				09/20/13 10:20	09/24/13 04:04	5

Client Sample ID: WCSS-17-(0-0.25)

Lab Sample ID: 480-45969-7

Date Collected: 09/16/13 12:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.185		0.185	0.118	mg/Kg	☼	09/20/13 10:20	09/24/13 04:32	5
PCB-1221	<0.185		0.185	0.0896	mg/Kg	☼	09/20/13 10:20	09/24/13 04:32	5
PCB-1232	<0.185		0.185	0.0784	mg/Kg	☼	09/20/13 10:20	09/24/13 04:32	5
PCB-1242	<0.185		0.185	0.0728	mg/Kg	☼	09/20/13 10:20	09/24/13 04:32	5
PCB-1248	<0.185		0.185	0.0952	mg/Kg	☼	09/20/13 10:20	09/24/13 04:32	5
PCB-1254	<0.185		0.185	0.0952	mg/Kg	☼	09/20/13 10:20	09/24/13 04:32	5
PCB-1260	<0.185		0.185	0.0952	mg/Kg	☼	09/20/13 10:20	09/24/13 04:32	5
PCB-1262	<0.185		0.185	0.151	mg/Kg	☼	09/20/13 10:20	09/24/13 04:32	5
PCB-1268	<0.185		0.185	0.0784	mg/Kg	☼	09/20/13 10:20	09/24/13 04:32	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	86		30 - 150				09/20/13 10:20	09/24/13 04:32	5
Tetrachloro-m-xylene	87		30 - 150				09/20/13 10:20	09/24/13 04:32	5
DCB Decachlorobiphenyl	107		30 - 150				09/20/13 10:20	09/24/13 04:32	5
DCB Decachlorobiphenyl	53		30 - 150				09/20/13 10:20	09/24/13 04:32	5

Client Sample ID: WCSS-19-(0-0.25)

Lab Sample ID: 480-45969-8

Date Collected: 09/16/13 12:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.177		0.177	0.113	mg/Kg	☼	09/20/13 10:20	09/24/13 04:48	5
PCB-1221	<0.177		0.177	0.0860	mg/Kg	☼	09/20/13 10:20	09/24/13 04:48	5
PCB-1232	<0.177		0.177	0.0753	mg/Kg	☼	09/20/13 10:20	09/24/13 04:48	5
PCB-1242	0.100	J	0.177	0.0699	mg/Kg	☼	09/20/13 10:20	09/24/13 04:48	5
PCB-1248	<0.177		0.177	0.0914	mg/Kg	☼	09/20/13 10:20	09/24/13 04:48	5
PCB-1254	<0.177		0.177	0.0914	mg/Kg	☼	09/20/13 10:20	09/24/13 04:48	5
PCB-1260	0.529		0.177	0.0914	mg/Kg	☼	09/20/13 10:20	09/24/13 04:48	5
PCB-1262	<0.177		0.177	0.145	mg/Kg	☼	09/20/13 10:20	09/24/13 04:48	5
PCB-1268	<0.177		0.177	0.0753	mg/Kg	☼	09/20/13 10:20	09/24/13 04:48	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	97		30 - 150				09/20/13 10:20	09/24/13 04:48	5
Tetrachloro-m-xylene	99		30 - 150				09/20/13 10:20	09/24/13 04:48	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-19-(0-0.25)

Lab Sample ID: 480-45969-8

Date Collected: 09/16/13 12:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	107		30 - 150	09/20/13 10:20	09/24/13 04:48	5
DCB Decachlorobiphenyl	113		30 - 150	09/20/13 10:20	09/24/13 04:48	5

Client Sample ID: WCSS-20-(0-0.25)

Lab Sample ID: 480-45969-9

Date Collected: 09/16/13 12:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 88.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.189		0.189	0.120	mg/Kg	☼	09/20/13 10:20	09/24/13 05:03	5
PCB-1221	<0.189		0.189	0.0914	mg/Kg	☼	09/20/13 10:20	09/24/13 05:03	5
PCB-1232	<0.189		0.189	0.0800	mg/Kg	☼	09/20/13 10:20	09/24/13 05:03	5
PCB-1242	<0.189		0.189	0.0743	mg/Kg	☼	09/20/13 10:20	09/24/13 05:03	5
PCB-1248	<0.189		0.189	0.0971	mg/Kg	☼	09/20/13 10:20	09/24/13 05:03	5
PCB-1254	<0.189		0.189	0.0971	mg/Kg	☼	09/20/13 10:20	09/24/13 05:03	5
PCB-1260	0.997		0.189	0.0971	mg/Kg	☼	09/20/13 10:20	09/24/13 05:03	5
PCB-1262	<0.189		0.189	0.154	mg/Kg	☼	09/20/13 10:20	09/24/13 05:03	5
PCB-1268	<0.189		0.189	0.0800	mg/Kg	☼	09/20/13 10:20	09/24/13 05:03	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	101		30 - 150				09/20/13 10:20	09/24/13 05:03	5
Tetrachloro-m-xylene	103		30 - 150				09/20/13 10:20	09/24/13 05:03	5
DCB Decachlorobiphenyl	405	X	30 - 150				09/20/13 10:20	09/24/13 05:03	5
DCB Decachlorobiphenyl	146		30 - 150				09/20/13 10:20	09/24/13 05:03	5

Client Sample ID: WCSS-21-(0-0.25)

Lab Sample ID: 480-45969-10

Date Collected: 09/16/13 11:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 95.1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.171		0.171	0.109	mg/Kg	☼	09/20/13 10:20	09/24/13 05:18	5
PCB-1221	<0.171		0.171	0.0831	mg/Kg	☼	09/20/13 10:20	09/24/13 05:18	5
PCB-1232	<0.171		0.171	0.0727	mg/Kg	☼	09/20/13 10:20	09/24/13 05:18	5
PCB-1242	<0.171		0.171	0.0675	mg/Kg	☼	09/20/13 10:20	09/24/13 05:18	5
PCB-1248	<0.171		0.171	0.0883	mg/Kg	☼	09/20/13 10:20	09/24/13 05:18	5
PCB-1254	<0.171		0.171	0.0883	mg/Kg	☼	09/20/13 10:20	09/24/13 05:18	5
PCB-1260	2.03		0.171	0.0883	mg/Kg	☼	09/20/13 10:20	09/24/13 05:18	5
PCB-1262	<0.171		0.171	0.140	mg/Kg	☼	09/20/13 10:20	09/24/13 05:18	5
PCB-1268	<0.171		0.171	0.0727	mg/Kg	☼	09/20/13 10:20	09/24/13 05:18	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	89		30 - 150				09/20/13 10:20	09/24/13 05:18	5
Tetrachloro-m-xylene	94		30 - 150				09/20/13 10:20	09/24/13 05:18	5
DCB Decachlorobiphenyl	137		30 - 150				09/20/13 10:20	09/24/13 05:18	5
DCB Decachlorobiphenyl	83		30 - 150				09/20/13 10:20	09/24/13 05:18	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-22-(0-0.25)

Lab Sample ID: 480-45969-11

Date Collected: 09/16/13 10:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.705		0.705	0.449	mg/Kg	☼	09/20/13 10:20	09/24/13 16:01	20
PCB-1221	<0.705		0.705	0.342	mg/Kg	☼	09/20/13 10:20	09/24/13 16:01	20
PCB-1232	<0.705		0.705	0.299	mg/Kg	☼	09/20/13 10:20	09/24/13 16:01	20
PCB-1242	<0.705		0.705	0.278	mg/Kg	☼	09/20/13 10:20	09/24/13 16:01	20
PCB-1248	<0.705		0.705	0.363	mg/Kg	☼	09/20/13 10:20	09/24/13 16:01	20
PCB-1254	<0.705		0.705	0.363	mg/Kg	☼	09/20/13 10:20	09/24/13 16:01	20
PCB-1260	6.39		0.705	0.363	mg/Kg	☼	09/20/13 10:20	09/24/13 16:01	20
PCB-1262	<0.705		0.705	0.577	mg/Kg	☼	09/20/13 10:20	09/24/13 16:01	20
PCB-1268	<0.705		0.705	0.299	mg/Kg	☼	09/20/13 10:20	09/24/13 16:01	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 10:20	09/24/13 16:01	20
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 10:20	09/24/13 16:01	20
DCB Decachlorobiphenyl	0	X	30 - 150				09/20/13 10:20	09/24/13 16:01	20
DCB Decachlorobiphenyl	0	X	30 - 150				09/20/13 10:20	09/24/13 16:01	20

Client Sample ID: WCSS-23-(0-0.25)

Lab Sample ID: 480-45969-12

Date Collected: 09/16/13 13:10

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.7

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.350		0.350	0.223	mg/Kg	☼	09/20/13 10:20	09/24/13 06:19	10
PCB-1221	<0.350		0.350	0.170	mg/Kg	☼	09/20/13 10:20	09/24/13 06:19	10
PCB-1232	<0.350		0.350	0.149	mg/Kg	☼	09/20/13 10:20	09/24/13 06:19	10
PCB-1242	<0.350		0.350	0.138	mg/Kg	☼	09/20/13 10:20	09/24/13 06:19	10
PCB-1248	<0.350		0.350	0.180	mg/Kg	☼	09/20/13 10:20	09/24/13 06:19	10
PCB-1254	<0.350		0.350	0.180	mg/Kg	☼	09/20/13 10:20	09/24/13 06:19	10
PCB-1260	5.29		0.350	0.180	mg/Kg	☼	09/20/13 10:20	09/24/13 06:19	10
PCB-1262	<0.350		0.350	0.286	mg/Kg	☼	09/20/13 10:20	09/24/13 06:19	10
PCB-1268	<0.350		0.350	0.149	mg/Kg	☼	09/20/13 10:20	09/24/13 06:19	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 10:20	09/24/13 06:19	10
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 10:20	09/24/13 06:19	10
DCB Decachlorobiphenyl	237	X	30 - 150				09/20/13 10:20	09/24/13 06:19	10
DCB Decachlorobiphenyl	109		30 - 150				09/20/13 10:20	09/24/13 06:19	10

Client Sample ID: WCSS-25-(0-0.25)

Lab Sample ID: 480-45969-13

Date Collected: 09/16/13 13:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 82.2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<20.2		20.2	12.8	mg/Kg	☼	09/20/13 10:20	09/24/13 16:16	500
PCB-1221	<20.2		20.2	9.78	mg/Kg	☼	09/20/13 10:20	09/24/13 16:16	500
PCB-1232	<20.2		20.2	8.56	mg/Kg	☼	09/20/13 10:20	09/24/13 16:16	500
PCB-1242	<20.2		20.2	7.95	mg/Kg	☼	09/20/13 10:20	09/24/13 16:16	500
PCB-1248	<20.2		20.2	10.4	mg/Kg	☼	09/20/13 10:20	09/24/13 16:16	500
PCB-1254	164		20.2	10.4	mg/Kg	☼	09/20/13 10:20	09/24/13 16:16	500

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-25-(0-0.25)

Lab Sample ID: 480-45969-13

Date Collected: 09/16/13 13:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 82.2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	<20.2		20.2	10.4	mg/Kg	☼	09/20/13 10:20	09/24/13 16:16	500
PCB-1262	<20.2		20.2	16.5	mg/Kg	☼	09/20/13 10:20	09/24/13 16:16	500
PCB-1268	<20.2		20.2	8.56	mg/Kg	☼	09/20/13 10:20	09/24/13 16:16	500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	09/20/13 10:20	09/24/13 16:16	500
Tetrachloro-m-xylene	0	X	30 - 150	09/20/13 10:20	09/24/13 16:16	500
DCB Decachlorobiphenyl	0	X	30 - 150	09/20/13 10:20	09/24/13 16:16	500
DCB Decachlorobiphenyl	0	X	30 - 150	09/20/13 10:20	09/24/13 16:16	500

Client Sample ID: WCSS-24-(0-0.25)

Lab Sample ID: 480-45969-14

Date Collected: 09/16/13 12:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.734		0.734	0.467	mg/Kg	☼	09/20/13 10:20	09/24/13 06:49	20
PCB-1221	<0.734		0.734	0.356	mg/Kg	☼	09/20/13 10:20	09/24/13 06:49	20
PCB-1232	<0.734		0.734	0.311	mg/Kg	☼	09/20/13 10:20	09/24/13 06:49	20
PCB-1242	<0.734		0.734	0.289	mg/Kg	☼	09/20/13 10:20	09/24/13 06:49	20
PCB-1248	<0.734		0.734	0.378	mg/Kg	☼	09/20/13 10:20	09/24/13 06:49	20
PCB-1254	<0.734		0.734	0.378	mg/Kg	☼	09/20/13 10:20	09/24/13 06:49	20
PCB-1260	5.76		0.734	0.378	mg/Kg	☼	09/20/13 10:20	09/24/13 06:49	20
PCB-1262	<0.734		0.734	0.600	mg/Kg	☼	09/20/13 10:20	09/24/13 06:49	20
PCB-1268	<0.734		0.734	0.311	mg/Kg	☼	09/20/13 10:20	09/24/13 06:49	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	09/20/13 10:20	09/24/13 06:49	20
Tetrachloro-m-xylene	0	X	30 - 150	09/20/13 10:20	09/24/13 06:49	20
DCB Decachlorobiphenyl	336	X	30 - 150	09/20/13 10:20	09/24/13 06:49	20
DCB Decachlorobiphenyl	298	X	30 - 150	09/20/13 10:20	09/24/13 06:49	20

Client Sample ID: WCSS-26-(0-0.25)

Lab Sample ID: 480-45969-15

Date Collected: 09/16/13 14:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0349		0.0349	0.0222	mg/Kg	☼	09/20/13 10:20	09/24/13 07:04	1
PCB-1221	<0.0349		0.0349	0.0169	mg/Kg	☼	09/20/13 10:20	09/24/13 07:04	1
PCB-1232	<0.0349		0.0349	0.0148	mg/Kg	☼	09/20/13 10:20	09/24/13 07:04	1
PCB-1242	<0.0349		0.0349	0.0138	mg/Kg	☼	09/20/13 10:20	09/24/13 07:04	1
PCB-1248	<0.0349		0.0349	0.0180	mg/Kg	☼	09/20/13 10:20	09/24/13 07:04	1
PCB-1254	<0.0349		0.0349	0.0180	mg/Kg	☼	09/20/13 10:20	09/24/13 07:04	1
PCB-1260	0.287		0.0349	0.0180	mg/Kg	☼	09/20/13 10:20	09/24/13 07:04	1
PCB-1262	<0.0349		0.0349	0.0286	mg/Kg	☼	09/20/13 10:20	09/24/13 07:04	1
PCB-1268	<0.0349		0.0349	0.0148	mg/Kg	☼	09/20/13 10:20	09/24/13 07:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	91		30 - 150	09/20/13 10:20	09/24/13 07:04	1
Tetrachloro-m-xylene	92		30 - 150	09/20/13 10:20	09/24/13 07:04	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-26-(0-0.25)

Date Collected: 09/16/13 14:55

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-15

Matrix: Solid

Percent Solids: 94.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	91		30 - 150	09/20/13 10:20	09/24/13 07:04	1
DCB Decachlorobiphenyl	80		30 - 150	09/20/13 10:20	09/24/13 07:04	1

Client Sample ID: WCSS-27-(0-0.25)

Date Collected: 09/16/13 14:15

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-16

Matrix: Solid

Percent Solids: 87.6

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0744		0.0744	0.0474	mg/Kg	☼	09/20/13 10:20	09/24/13 07:19	2
PCB-1221	<0.0744		0.0744	0.0361	mg/Kg	☼	09/20/13 10:20	09/24/13 07:19	2
PCB-1232	<0.0744		0.0744	0.0316	mg/Kg	☼	09/20/13 10:20	09/24/13 07:19	2
PCB-1242	<0.0744		0.0744	0.0293	mg/Kg	☼	09/20/13 10:20	09/24/13 07:19	2
PCB-1248	<0.0744		0.0744	0.0383	mg/Kg	☼	09/20/13 10:20	09/24/13 07:19	2
PCB-1254	<0.0744		0.0744	0.0383	mg/Kg	☼	09/20/13 10:20	09/24/13 07:19	2
PCB-1260	0.813		0.0744	0.0383	mg/Kg	☼	09/20/13 10:20	09/24/13 07:19	2
PCB-1262	<0.0744		0.0744	0.0609	mg/Kg	☼	09/20/13 10:20	09/24/13 07:19	2
PCB-1268	<0.0744		0.0744	0.0316	mg/Kg	☼	09/20/13 10:20	09/24/13 07:19	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	96		30 - 150				09/20/13 10:20	09/24/13 07:19	2
Tetrachloro-m-xylene	91		30 - 150				09/20/13 10:20	09/24/13 07:19	2
DCB Decachlorobiphenyl	115		30 - 150				09/20/13 10:20	09/24/13 07:19	2
DCB Decachlorobiphenyl	94		30 - 150				09/20/13 10:20	09/24/13 07:19	2

Client Sample ID: WCSS-28-(0-0.25)

Date Collected: 09/16/13 13:30

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-17

Matrix: Solid

Percent Solids: 93.7

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0698		0.0698	0.0444	mg/Kg	☼	09/20/13 10:20	09/24/13 07:35	2
PCB-1221	<0.0698		0.0698	0.0339	mg/Kg	☼	09/20/13 10:20	09/24/13 07:35	2
PCB-1232	<0.0698		0.0698	0.0296	mg/Kg	☼	09/20/13 10:20	09/24/13 07:35	2
PCB-1242	<0.0698		0.0698	0.0275	mg/Kg	☼	09/20/13 10:20	09/24/13 07:35	2
PCB-1248	<0.0698		0.0698	0.0360	mg/Kg	☼	09/20/13 10:20	09/24/13 07:35	2
PCB-1254	<0.0698		0.0698	0.0360	mg/Kg	☼	09/20/13 10:20	09/24/13 07:35	2
PCB-1260	0.133		0.0698	0.0360	mg/Kg	☼	09/20/13 10:20	09/24/13 07:35	2
PCB-1262	<0.0698		0.0698	0.0571	mg/Kg	☼	09/20/13 10:20	09/24/13 07:35	2
PCB-1268	<0.0698		0.0698	0.0296	mg/Kg	☼	09/20/13 10:20	09/24/13 07:35	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	83		30 - 150				09/20/13 10:20	09/24/13 07:35	2
Tetrachloro-m-xylene	67		30 - 150				09/20/13 10:20	09/24/13 07:35	2
DCB Decachlorobiphenyl	635	X	30 - 150				09/20/13 10:20	09/24/13 07:35	2
DCB Decachlorobiphenyl	61		30 - 150				09/20/13 10:20	09/24/13 07:35	2

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-29-(0-0.25)

Lab Sample ID: 480-45969-18

Date Collected: 09/16/13 14:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.6

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<1.77		1.77	1.13	mg/Kg	☼	09/20/13 09:23	09/24/13 03:54	50
PCB-1221	<1.77		1.77	0.859	mg/Kg	☼	09/20/13 09:23	09/24/13 03:54	50
PCB-1232	<1.77		1.77	0.751	mg/Kg	☼	09/20/13 09:23	09/24/13 03:54	50
PCB-1242	<1.77		1.77	0.698	mg/Kg	☼	09/20/13 09:23	09/24/13 03:54	50
PCB-1248	<1.77		1.77	0.912	mg/Kg	☼	09/20/13 09:23	09/24/13 03:54	50
PCB-1254	<1.77		1.77	0.912	mg/Kg	☼	09/20/13 09:23	09/24/13 03:54	50
PCB-1260	13.8		1.77	0.912	mg/Kg	☼	09/20/13 09:23	09/24/13 03:54	50
PCB-1262	<1.77		1.77	1.45	mg/Kg	☼	09/20/13 09:23	09/24/13 03:54	50
PCB-1268	<1.77		1.77	0.751	mg/Kg	☼	09/20/13 09:23	09/24/13 03:54	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	09/20/13 09:23	09/24/13 03:54	50
Tetrachloro-m-xylene	0	X	30 - 150	09/20/13 09:23	09/24/13 03:54	50
DCB Decachlorobiphenyl	0	X	30 - 150	09/20/13 09:23	09/24/13 03:54	50
DCB Decachlorobiphenyl	0	X	30 - 150	09/20/13 09:23	09/24/13 03:54	50

Client Sample ID: WCSS-30-(0-0.25)

Lab Sample ID: 480-45969-19

Date Collected: 09/16/13 14:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.357		0.357	0.227	mg/Kg	☼	09/20/13 09:23	09/24/13 04:09	10
PCB-1221	<0.357		0.357	0.173	mg/Kg	☼	09/20/13 09:23	09/24/13 04:09	10
PCB-1232	<0.357		0.357	0.152	mg/Kg	☼	09/20/13 09:23	09/24/13 04:09	10
PCB-1242	<0.357		0.357	0.141	mg/Kg	☼	09/20/13 09:23	09/24/13 04:09	10
PCB-1248	<0.357		0.357	0.184	mg/Kg	☼	09/20/13 09:23	09/24/13 04:09	10
PCB-1254	0.483		0.357	0.184	mg/Kg	☼	09/20/13 09:23	09/24/13 04:09	10
PCB-1260	<0.357		0.357	0.184	mg/Kg	☼	09/20/13 09:23	09/24/13 04:09	10
PCB-1262	<0.357		0.357	0.292	mg/Kg	☼	09/20/13 09:23	09/24/13 04:09	10
PCB-1268	<0.357		0.357	0.152	mg/Kg	☼	09/20/13 09:23	09/24/13 04:09	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	09/20/13 09:23	09/24/13 04:09	10
Tetrachloro-m-xylene	0	X	30 - 150	09/20/13 09:23	09/24/13 04:09	10
DCB Decachlorobiphenyl	0	X	30 - 150	09/20/13 09:23	09/24/13 04:09	10
DCB Decachlorobiphenyl	0	X	30 - 150	09/20/13 09:23	09/24/13 04:09	10

Client Sample ID: WCSS-32-(0-0.25)

Lab Sample ID: 480-45969-21

Date Collected: 09/16/13 14:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0352		0.0352	0.0224	mg/Kg	☼	09/20/13 09:23	09/24/13 04:23	1
PCB-1221	<0.0352		0.0352	0.0171	mg/Kg	☼	09/20/13 09:23	09/24/13 04:23	1
PCB-1232	<0.0352		0.0352	0.0149	mg/Kg	☼	09/20/13 09:23	09/24/13 04:23	1
PCB-1242	<0.0352		0.0352	0.0139	mg/Kg	☼	09/20/13 09:23	09/24/13 04:23	1
PCB-1248	<0.0352		0.0352	0.0181	mg/Kg	☼	09/20/13 09:23	09/24/13 04:23	1
PCB-1254	<0.0352		0.0352	0.0181	mg/Kg	☼	09/20/13 09:23	09/24/13 04:23	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-32-(0-0.25)

Lab Sample ID: 480-45969-21

Date Collected: 09/16/13 14:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	0.309		0.0352	0.0181	mg/Kg	☼	09/20/13 09:23	09/24/13 04:23	1
PCB-1262	<0.0352		0.0352	0.0288	mg/Kg	☼	09/20/13 09:23	09/24/13 04:23	1
PCB-1268	<0.0352		0.0352	0.0149	mg/Kg	☼	09/20/13 09:23	09/24/13 04:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	54		30 - 150	09/20/13 09:23	09/24/13 04:23	1
Tetrachloro-m-xylene	67		30 - 150	09/20/13 09:23	09/24/13 04:23	1
DCB Decachlorobiphenyl	78		30 - 150	09/20/13 09:23	09/24/13 04:23	1
DCB Decachlorobiphenyl	94		30 - 150	09/20/13 09:23	09/24/13 04:23	1

Client Sample ID: WCSS-33-(0-0.25)

Lab Sample ID: 480-45969-22

Date Collected: 09/16/13 15:20

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.390		0.390	0.248	mg/Kg	☼	09/20/13 09:23	09/24/13 04:38	10
PCB-1221	<0.390		0.390	0.189	mg/Kg	☼	09/20/13 09:23	09/24/13 04:38	10
PCB-1232	<0.390		0.390	0.165	mg/Kg	☼	09/20/13 09:23	09/24/13 04:38	10
PCB-1242	<0.390		0.390	0.154	mg/Kg	☼	09/20/13 09:23	09/24/13 04:38	10
PCB-1248	<0.390		0.390	0.201	mg/Kg	☼	09/20/13 09:23	09/24/13 04:38	10
PCB-1254	<0.390		0.390	0.201	mg/Kg	☼	09/20/13 09:23	09/24/13 04:38	10
PCB-1260	5.03		0.390	0.201	mg/Kg	☼	09/20/13 09:23	09/24/13 04:38	10
PCB-1262	<0.390		0.390	0.319	mg/Kg	☼	09/20/13 09:23	09/24/13 04:38	10
PCB-1268	<0.390		0.390	0.165	mg/Kg	☼	09/20/13 09:23	09/24/13 04:38	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		30 - 150	09/20/13 09:23	09/24/13 04:38	10
Tetrachloro-m-xylene	106		30 - 150	09/20/13 09:23	09/24/13 04:38	10
DCB Decachlorobiphenyl	226	X	30 - 150	09/20/13 09:23	09/24/13 04:38	10
DCB Decachlorobiphenyl	282	X	30 - 150	09/20/13 09:23	09/24/13 04:38	10

Client Sample ID: WCSS-34-(0-0.25)

Lab Sample ID: 480-45969-23

Date Collected: 09/16/13 15:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.391		0.391	0.249	mg/Kg	☼	09/20/13 09:23	09/24/13 04:53	10
PCB-1221	<0.391		0.391	0.190	mg/Kg	☼	09/20/13 09:23	09/24/13 04:53	10
PCB-1232	<0.391		0.391	0.166	mg/Kg	☼	09/20/13 09:23	09/24/13 04:53	10
PCB-1242	<0.391		0.391	0.154	mg/Kg	☼	09/20/13 09:23	09/24/13 04:53	10
PCB-1248	<0.391		0.391	0.202	mg/Kg	☼	09/20/13 09:23	09/24/13 04:53	10
PCB-1254	<0.391		0.391	0.202	mg/Kg	☼	09/20/13 09:23	09/24/13 04:53	10
PCB-1260	5.31		0.391	0.202	mg/Kg	☼	09/20/13 09:23	09/24/13 04:53	10
PCB-1262	<0.391		0.391	0.320	mg/Kg	☼	09/20/13 09:23	09/24/13 04:53	10
PCB-1268	<0.391		0.391	0.166	mg/Kg	☼	09/20/13 09:23	09/24/13 04:53	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150	09/20/13 09:23	09/24/13 04:53	10
Tetrachloro-m-xylene	0	X	30 - 150	09/20/13 09:23	09/24/13 04:53	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-34-(0-0.25)

Date Collected: 09/16/13 15:45

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-23

Matrix: Solid

Percent Solids: 85.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	221	X	30 - 150	09/20/13 09:23	09/24/13 04:53	10
DCB Decachlorobiphenyl	286	X	30 - 150	09/20/13 09:23	09/24/13 04:53	10

Client Sample ID: WCSS-35-(0-0.25)

Date Collected: 09/16/13 15:50

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-24

Matrix: Solid

Percent Solids: 92.6

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.176		0.176	0.112	mg/Kg	☼	09/20/13 09:23	09/24/13 05:08	5
PCB-1221	<0.176		0.176	0.0853	mg/Kg	☼	09/20/13 09:23	09/24/13 05:08	5
PCB-1232	<0.176		0.176	0.0747	mg/Kg	☼	09/20/13 09:23	09/24/13 05:08	5
PCB-1242	<0.176		0.176	0.0693	mg/Kg	☼	09/20/13 09:23	09/24/13 05:08	5
PCB-1248	<0.176		0.176	0.0907	mg/Kg	☼	09/20/13 09:23	09/24/13 05:08	5
PCB-1254	<0.176		0.176	0.0907	mg/Kg	☼	09/20/13 09:23	09/24/13 05:08	5
PCB-1260	1.41		0.176	0.0907	mg/Kg	☼	09/20/13 09:23	09/24/13 05:08	5
PCB-1262	<0.176		0.176	0.144	mg/Kg	☼	09/20/13 09:23	09/24/13 05:08	5
PCB-1268	<0.176		0.176	0.0747	mg/Kg	☼	09/20/13 09:23	09/24/13 05:08	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	89		30 - 150				09/20/13 09:23	09/24/13 05:08	5
Tetrachloro-m-xylene	89		30 - 150				09/20/13 09:23	09/24/13 05:08	5
DCB Decachlorobiphenyl	102		30 - 150				09/20/13 09:23	09/24/13 05:08	5
DCB Decachlorobiphenyl	203	X	30 - 150				09/20/13 09:23	09/24/13 05:08	5

Client Sample ID: WCSS-36-(0-0.25)

Date Collected: 09/16/13 15:05

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-25

Matrix: Solid

Percent Solids: 92.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.361		0.361	0.229	mg/Kg	☼	09/20/13 09:23	09/24/13 05:23	10
PCB-1221	<0.361		0.361	0.175	mg/Kg	☼	09/20/13 09:23	09/24/13 05:23	10
PCB-1232	<0.361		0.361	0.153	mg/Kg	☼	09/20/13 09:23	09/24/13 05:23	10
PCB-1242	<0.361		0.361	0.142	mg/Kg	☼	09/20/13 09:23	09/24/13 05:23	10
PCB-1248	<0.361		0.361	0.186	mg/Kg	☼	09/20/13 09:23	09/24/13 05:23	10
PCB-1254	<0.361		0.361	0.186	mg/Kg	☼	09/20/13 09:23	09/24/13 05:23	10
PCB-1260	3.30		0.361	0.186	mg/Kg	☼	09/20/13 09:23	09/24/13 05:23	10
PCB-1262	<0.361		0.361	0.295	mg/Kg	☼	09/20/13 09:23	09/24/13 05:23	10
PCB-1268	<0.361		0.361	0.153	mg/Kg	☼	09/20/13 09:23	09/24/13 05:23	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	104		30 - 150				09/20/13 09:23	09/24/13 05:23	10
Tetrachloro-m-xylene	111		30 - 150				09/20/13 09:23	09/24/13 05:23	10
DCB Decachlorobiphenyl	169	X	30 - 150				09/20/13 09:23	09/24/13 05:23	10
DCB Decachlorobiphenyl	210	X	30 - 150				09/20/13 09:23	09/24/13 05:23	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-40-(0-0.25)

Lab Sample ID: 480-45969-28

Date Collected: 09/16/13 08:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 96.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.347		0.347	0.221	mg/Kg	☼	09/20/13 09:23	09/24/13 05:38	10
PCB-1221	<0.347		0.347	0.168	mg/Kg	☼	09/20/13 09:23	09/24/13 05:38	10
PCB-1232	<0.347		0.347	0.147	mg/Kg	☼	09/20/13 09:23	09/24/13 05:38	10
PCB-1242	<0.347		0.347	0.137	mg/Kg	☼	09/20/13 09:23	09/24/13 05:38	10
PCB-1248	<0.347		0.347	0.179	mg/Kg	☼	09/20/13 09:23	09/24/13 05:38	10
PCB-1254	<0.347		0.347	0.179	mg/Kg	☼	09/20/13 09:23	09/24/13 05:38	10
PCB-1260	3.05		0.347	0.179	mg/Kg	☼	09/20/13 09:23	09/24/13 05:38	10
PCB-1262	<0.347		0.347	0.284	mg/Kg	☼	09/20/13 09:23	09/24/13 05:38	10
PCB-1268	<0.347		0.347	0.147	mg/Kg	☼	09/20/13 09:23	09/24/13 05:38	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 09:23	09/24/13 05:38	10
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 09:23	09/24/13 05:38	10
DCB Decachlorobiphenyl	154	X	30 - 150				09/20/13 09:23	09/24/13 05:38	10
DCB Decachlorobiphenyl	304	X	30 - 150				09/20/13 09:23	09/24/13 05:38	10

Client Sample ID: WCSS-41-(0-0.25)

Lab Sample ID: 480-45969-29

Date Collected: 09/16/13 09:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 90.3

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<3.68		3.68	2.34	mg/Kg	☼	09/20/13 09:23	09/24/13 05:53	100
PCB-1221	<3.68		3.68	1.78	mg/Kg	☼	09/20/13 09:23	09/24/13 05:53	100
PCB-1232	<3.68		3.68	1.56	mg/Kg	☼	09/20/13 09:23	09/24/13 05:53	100
PCB-1242	<3.68		3.68	1.45	mg/Kg	☼	09/20/13 09:23	09/24/13 05:53	100
PCB-1248	<3.68		3.68	1.90	mg/Kg	☼	09/20/13 09:23	09/24/13 05:53	100
PCB-1254	<3.68		3.68	1.90	mg/Kg	☼	09/20/13 09:23	09/24/13 05:53	100
PCB-1260	33.4		3.68	1.90	mg/Kg	☼	09/20/13 09:23	09/24/13 05:53	100
PCB-1262	<3.68		3.68	3.01	mg/Kg	☼	09/20/13 09:23	09/24/13 05:53	100
PCB-1268	<3.68		3.68	1.56	mg/Kg	☼	09/20/13 09:23	09/24/13 05:53	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 09:23	09/24/13 05:53	100
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 09:23	09/24/13 05:53	100
DCB Decachlorobiphenyl	0	X	30 - 150				09/20/13 09:23	09/24/13 05:53	100
DCB Decachlorobiphenyl	0	X	30 - 150				09/20/13 09:23	09/24/13 05:53	100

Client Sample ID: WCSS-43-(0-0.25)

Lab Sample ID: 480-45969-30

Date Collected: 09/16/13 09:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 98.8

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<16.7		16.7	10.7	mg/Kg	☼	09/20/13 09:23	09/26/13 13:50	500
PCB-1221	<16.7		16.7	8.11	mg/Kg	☼	09/20/13 09:23	09/26/13 13:50	500
PCB-1232	<16.7		16.7	7.10	mg/Kg	☼	09/20/13 09:23	09/26/13 13:50	500
PCB-1242	<16.7		16.7	6.59	mg/Kg	☼	09/20/13 09:23	09/26/13 13:50	500
PCB-1248	<16.7		16.7	8.62	mg/Kg	☼	09/20/13 09:23	09/26/13 13:50	500
PCB-1254	<16.7		16.7	8.62	mg/Kg	☼	09/20/13 09:23	09/26/13 13:50	500

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-43-(0-0.25)

Lab Sample ID: 480-45969-30

Date Collected: 09/16/13 09:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 98.8

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1260	173		16.7	8.62	mg/Kg	☼	09/20/13 09:23	09/26/13 13:50	500
PCB-1262	<16.7		16.7	13.7	mg/Kg	☼	09/20/13 09:23	09/26/13 13:50	500
PCB-1268	<16.7		16.7	7.10	mg/Kg	☼	09/20/13 09:23	09/26/13 13:50	500
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 09:23	09/26/13 13:50	500
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 09:23	09/26/13 13:50	500
DCB Decachlorobiphenyl	0	X	30 - 150				09/20/13 09:23	09/26/13 13:50	500
DCB Decachlorobiphenyl	0	X	30 - 150				09/20/13 09:23	09/26/13 13:50	500

Client Sample ID: WCSS-44-(0-0.25)

Lab Sample ID: 480-45969-31

Date Collected: 09/16/13 15:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 99.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.670		0.670	0.426	mg/Kg	☼	09/20/13 09:23	09/26/13 14:05	20
PCB-1221	<0.670		0.670	0.325	mg/Kg	☼	09/20/13 09:23	09/26/13 14:05	20
PCB-1232	<0.670		0.670	0.284	mg/Kg	☼	09/20/13 09:23	09/26/13 14:05	20
PCB-1242	1.74		0.670	0.264	mg/Kg	☼	09/20/13 09:23	09/26/13 14:05	20
PCB-1248	<0.670		0.670	0.345	mg/Kg	☼	09/20/13 09:23	09/26/13 14:05	20
PCB-1254	8.32		0.670	0.345	mg/Kg	☼	09/20/13 09:23	09/26/13 14:05	20
PCB-1260	<0.670		0.670	0.345	mg/Kg	☼	09/20/13 09:23	09/26/13 14:05	20
PCB-1262	<0.670		0.670	0.548	mg/Kg	☼	09/20/13 09:23	09/26/13 14:05	20
PCB-1268	<0.670		0.670	0.284	mg/Kg	☼	09/20/13 09:23	09/26/13 14:05	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 09:23	09/26/13 14:05	20
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 09:23	09/26/13 14:05	20
DCB Decachlorobiphenyl	305	X	30 - 150				09/20/13 09:23	09/26/13 14:05	20
DCB Decachlorobiphenyl	226	X	30 - 150				09/20/13 09:23	09/26/13 14:05	20

Client Sample ID: WCSS-45-(0-0.25)

Lab Sample ID: 480-45969-32

Date Collected: 09/16/13 09:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.375		0.375	0.239	mg/Kg	☼	09/20/13 09:23	09/26/13 14:20	10
PCB-1221	<0.375		0.375	0.182	mg/Kg	☼	09/20/13 09:23	09/26/13 14:20	10
PCB-1232	<0.375		0.375	0.159	mg/Kg	☼	09/20/13 09:23	09/26/13 14:20	10
PCB-1242	0.189	J	0.375	0.148	mg/Kg	☼	09/20/13 09:23	09/26/13 14:20	10
PCB-1248	<0.375		0.375	0.193	mg/Kg	☼	09/20/13 09:23	09/26/13 14:20	10
PCB-1254	<0.375		0.375	0.193	mg/Kg	☼	09/20/13 09:23	09/26/13 14:20	10
PCB-1260	5.62		0.375	0.193	mg/Kg	☼	09/20/13 09:23	09/26/13 14:20	10
PCB-1262	<0.375		0.375	0.307	mg/Kg	☼	09/20/13 09:23	09/26/13 14:20	10
PCB-1268	<0.375		0.375	0.159	mg/Kg	☼	09/20/13 09:23	09/26/13 14:20	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 09:23	09/26/13 14:20	10
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 09:23	09/26/13 14:20	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-45-(0-0.25)

Date Collected: 09/16/13 09:30

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-32

Matrix: Solid

Percent Solids: 87.4

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	192	X	30 - 150	09/20/13 09:23	09/26/13 14:20	10
DCB Decachlorobiphenyl	161	X	30 - 150	09/20/13 09:23	09/26/13 14:20	10

Client Sample ID: WCSS-918-(0-0.25)

Date Collected: 09/16/13 11:00

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-36

Matrix: Solid

Percent Solids: 89.0

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.370		0.370	0.236	mg/Kg	☼	09/20/13 09:23	09/26/13 14:35	10
PCB-1221	<0.370		0.370	0.180	mg/Kg	☼	09/20/13 09:23	09/26/13 14:35	10
PCB-1232	<0.370		0.370	0.157	mg/Kg	☼	09/20/13 09:23	09/26/13 14:35	10
PCB-1242	0.241	J	0.370	0.146	mg/Kg	☼	09/20/13 09:23	09/26/13 14:35	10
PCB-1248	<0.370		0.370	0.191	mg/Kg	☼	09/20/13 09:23	09/26/13 14:35	10
PCB-1254	<0.370		0.370	0.191	mg/Kg	☼	09/20/13 09:23	09/26/13 14:35	10
PCB-1260	2.25		0.370	0.191	mg/Kg	☼	09/20/13 09:23	09/26/13 14:35	10
PCB-1262	<0.370		0.370	0.303	mg/Kg	☼	09/20/13 09:23	09/26/13 14:35	10
PCB-1268	<0.370		0.370	0.157	mg/Kg	☼	09/20/13 09:23	09/26/13 14:35	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 09:23	09/26/13 14:35	10
Tetrachloro-m-xylene	0	X	30 - 150				09/20/13 09:23	09/26/13 14:35	10
DCB Decachlorobiphenyl	194	X	30 - 150				09/20/13 09:23	09/26/13 14:35	10
DCB Decachlorobiphenyl	159	X	30 - 150				09/20/13 09:23	09/26/13 14:35	10

Client Sample ID: WCEB-27-(0-0.25)

Date Collected: 09/16/13 14:25

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-37

Matrix: Water

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.243		0.243	0.0974	ug/L		09/24/13 14:50	09/25/13 08:41	1
PCB-1221	<0.243		0.243	0.0974	ug/L		09/24/13 14:50	09/25/13 08:41	1
PCB-1232	<0.243		0.243	0.0974	ug/L		09/24/13 14:50	09/25/13 08:41	1
PCB-1242	<0.243		0.243	0.0974	ug/L		09/24/13 14:50	09/25/13 08:41	1
PCB-1248	<0.243		0.243	0.0974	ug/L		09/24/13 14:50	09/25/13 08:41	1
PCB-1254	<0.243		0.243	0.0974	ug/L		09/24/13 14:50	09/25/13 08:41	1
PCB-1260	<0.243		0.243	0.0974	ug/L		09/24/13 14:50	09/25/13 08:41	1
PCB-1262	<0.243		0.243	0.0974	ug/L		09/24/13 14:50	09/25/13 08:41	1
PCB-1268	<0.243		0.243	0.0974	ug/L		09/24/13 14:50	09/25/13 08:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	77		30 - 150				09/24/13 14:50	09/25/13 08:41	1
DCB Decachlorobiphenyl	61		30 - 150				09/24/13 14:50	09/25/13 08:41	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-935-(0-0.25)

Lab Sample ID: 480-45969-39

Date Collected: 09/16/13 15:00

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 93.8

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.174		0.174	0.111	mg/Kg	☼	09/20/13 09:23	09/26/13 14:51	5
PCB-1221	<0.174		0.174	0.0843	mg/Kg	☼	09/20/13 09:23	09/26/13 14:51	5
PCB-1232	<0.174		0.174	0.0737	mg/Kg	☼	09/20/13 09:23	09/26/13 14:51	5
PCB-1242	0.138	J	0.174	0.0685	mg/Kg	☼	09/20/13 09:23	09/26/13 14:51	5
PCB-1248	<0.174		0.174	0.0895	mg/Kg	☼	09/20/13 09:23	09/26/13 14:51	5
PCB-1254	<0.174		0.174	0.0895	mg/Kg	☼	09/20/13 09:23	09/26/13 14:51	5
PCB-1260	1.27		0.174	0.0895	mg/Kg	☼	09/20/13 09:23	09/26/13 14:51	5
PCB-1262	<0.174		0.174	0.142	mg/Kg	☼	09/20/13 09:23	09/26/13 14:51	5
PCB-1268	<0.174		0.174	0.0737	mg/Kg	☼	09/20/13 09:23	09/26/13 14:51	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>Tetrachloro-m-xylene</i>	97		30 - 150	09/20/13 09:23	09/26/13 14:51	5
<i>Tetrachloro-m-xylene</i>	99		30 - 150	09/20/13 09:23	09/26/13 14:51	5
<i>DCB Decachlorobiphenyl</i>	133		30 - 150	09/20/13 09:23	09/26/13 14:51	5
<i>DCB Decachlorobiphenyl</i>	102		30 - 150	09/20/13 09:23	09/26/13 14:51	5

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TCX1 (30-150)	TCX2 (30-150)	DCB1 (30-150)	DCB2 (30-150)
480-45969-1	WCSS-11-(0-0.25)	0 X	0 X	406 X	287 X
480-45969-2	WCSS-13-(0-0.25)	79	75	76	73
480-45969-6	WCSS-18-(0-0.25)	94	91	168 X	145
480-45969-7	WCSS-17-(0-0.25)	86	87	107	53
480-45969-8	WCSS-19-(0-0.25)	97	99	107	113
480-45969-9	WCSS-20-(0-0.25)	101	103	405 X	146
480-45969-10	WCSS-21-(0-0.25)	89	94	137	83
480-45969-11	WCSS-22-(0-0.25)	0 X	0 X	0 X	0 X
480-45969-12	WCSS-23-(0-0.25)	0 X	0 X	237 X	109
480-45969-13	WCSS-25-(0-0.25)	0 X	0 X	0 X	0 X
480-45969-14	WCSS-24-(0-0.25)	0 X	0 X	336 X	298 X
480-45969-15	WCSS-26-(0-0.25)	91	92	91	80
480-45969-16	WCSS-27-(0-0.25)	96	91	115	94
480-45969-17	WCSS-28-(0-0.25)	83	67	635 X	61
480-45969-18	WCSS-29-(0-0.25)	0 X	0 X	0 X	0 X
480-45969-19	WCSS-30-(0-0.25)	0 X	0 X	0 X	0 X
480-45969-21	WCSS-32-(0-0.25)	54	67	78	94
480-45969-22	WCSS-33-(0-0.25)	102	106	226 X	282 X
480-45969-23	WCSS-34-(0-0.25)	0 X	0 X	221 X	286 X
480-45969-24	WCSS-35-(0-0.25)	89	89	102	203 X
480-45969-25	WCSS-36-(0-0.25)	104	111	169 X	210 X
480-45969-28	WCSS-40-(0-0.25)	0 X	0 X	154 X	304 X
480-45969-29	WCSS-41-(0-0.25)	0 X	0 X	0 X	0 X
480-45969-30	WCSS-43-(0-0.25)	0 X	0 X	0 X	0 X
480-45969-31	WCSS-44-(0-0.25)	0 X	0 X	305 X	226 X
480-45969-32	WCSS-45-(0-0.25)	0 X	0 X	192 X	161 X
480-45969-36	WCSS-918-(0-0.25)	0 X	0 X	194 X	159 X
480-45969-39	WCSS-935-(0-0.25)	97	99	133	102
LCS 240-102228/24-A	Lab Control Sample	78	80	93	117
LCS 240-102245/24-A	Lab Control Sample	100	166 X	94	90
LCSD 240-102228/25-A	Lab Control Sample Dup	81	85	93	106
LCSD 240-102245/25-A	Lab Control Sample Dup	85	112	85	77
MB 240-102228/23-A	Method Blank	76	112	83	99
MB 240-102245/23-A	Method Blank	83	94	79	75

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX1 (30-150)	DCB1 (30-150)
480-45969-37	WCEB-27-(0-0.25)	77	61
LCS 480-140916/2-A	Lab Control Sample	81	79
LCSD 480-140916/3-A	Lab Control Sample Dup	76	72
MB 480-140916/1-A	Method Blank	76	46

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

1

2

3

4

5

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11

12

13

14

15

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Lab Sample ID: MB 240-102228/23-A

Matrix: Solid

Analysis Batch: 102599

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 102228

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0330		0.0330	0.0210	mg/Kg		09/20/13 09:23	09/24/13 06:08	1
PCB-1221	<0.0330		0.0330	0.0160	mg/Kg		09/20/13 09:23	09/24/13 06:08	1
PCB-1232	<0.0330		0.0330	0.0140	mg/Kg		09/20/13 09:23	09/24/13 06:08	1
PCB-1242	<0.0330		0.0330	0.0130	mg/Kg		09/20/13 09:23	09/24/13 06:08	1
PCB-1248	<0.0330		0.0330	0.0170	mg/Kg		09/20/13 09:23	09/24/13 06:08	1
PCB-1254	<0.0330		0.0330	0.0170	mg/Kg		09/20/13 09:23	09/24/13 06:08	1
PCB-1260	<0.0330		0.0330	0.0170	mg/Kg		09/20/13 09:23	09/24/13 06:08	1
PCB-1262	<0.0330		0.0330	0.0270	mg/Kg		09/20/13 09:23	09/24/13 06:08	1
PCB-1268	<0.0330		0.0330	0.0140	mg/Kg		09/20/13 09:23	09/24/13 06:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		30 - 150	09/20/13 09:23	09/24/13 06:08	1
Tetrachloro-m-xylene	112		30 - 150	09/20/13 09:23	09/24/13 06:08	1
DCB Decachlorobiphenyl	83		30 - 150	09/20/13 09:23	09/24/13 06:08	1
DCB Decachlorobiphenyl	99		30 - 150	09/20/13 09:23	09/24/13 06:08	1

Lab Sample ID: LCS 240-102228/24-A

Matrix: Solid

Analysis Batch: 102599

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 102228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.333	0.2486		mg/Kg		75	40 - 140
PCB-1260	0.333	0.2809		mg/Kg		84	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	78		30 - 150
Tetrachloro-m-xylene	80		30 - 150
DCB Decachlorobiphenyl	93		30 - 150
DCB Decachlorobiphenyl	117		30 - 150

Lab Sample ID: LCSD 240-102228/25-A

Matrix: Solid

Analysis Batch: 102599

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 102228

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.333	0.2452		mg/Kg		74	40 - 140	1	30
PCB-1260	0.333	0.2765		mg/Kg		83	40 - 140	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	81		30 - 150
Tetrachloro-m-xylene	85		30 - 150
DCB Decachlorobiphenyl	93		30 - 150
DCB Decachlorobiphenyl	106		30 - 150

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: MB 240-102245/23-A

Matrix: Solid

Analysis Batch: 102598

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 102245

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.0330		0.0330	0.0210	mg/Kg		09/20/13 10:20	09/24/13 05:33	1
PCB-1221	<0.0330		0.0330	0.0160	mg/Kg		09/20/13 10:20	09/24/13 05:33	1
PCB-1232	<0.0330		0.0330	0.0140	mg/Kg		09/20/13 10:20	09/24/13 05:33	1
PCB-1242	<0.0330		0.0330	0.0130	mg/Kg		09/20/13 10:20	09/24/13 05:33	1
PCB-1248	<0.0330		0.0330	0.0170	mg/Kg		09/20/13 10:20	09/24/13 05:33	1
PCB-1254	<0.0330		0.0330	0.0170	mg/Kg		09/20/13 10:20	09/24/13 05:33	1
PCB-1260	<0.0330		0.0330	0.0170	mg/Kg		09/20/13 10:20	09/24/13 05:33	1
PCB-1262	<0.0330		0.0330	0.0270	mg/Kg		09/20/13 10:20	09/24/13 05:33	1
PCB-1268	<0.0330		0.0330	0.0140	mg/Kg		09/20/13 10:20	09/24/13 05:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	83		30 - 150	09/20/13 10:20	09/24/13 05:33	1
Tetrachloro-m-xylene	94		30 - 150	09/20/13 10:20	09/24/13 05:33	1
DCB Decachlorobiphenyl	79		30 - 150	09/20/13 10:20	09/24/13 05:33	1
DCB Decachlorobiphenyl	75		30 - 150	09/20/13 10:20	09/24/13 05:33	1

Lab Sample ID: LCS 240-102245/24-A

Matrix: Solid

Analysis Batch: 102804

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 102245

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.333	0.2663		mg/Kg		80	40 - 140
PCB-1260	0.333	0.2778		mg/Kg		83	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	100		30 - 150
Tetrachloro-m-xylene	166	X	30 - 150
DCB Decachlorobiphenyl	94		30 - 150
DCB Decachlorobiphenyl	90		30 - 150

Lab Sample ID: LCSD 240-102245/25-A

Matrix: Solid

Analysis Batch: 102598

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 102245

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.333	0.2759		mg/Kg		83	40 - 140	NaN	30
PCB-1260	0.333	0.2813		mg/Kg		84	40 - 140	NaN	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	85		30 - 150
Tetrachloro-m-xylene	112		30 - 150
DCB Decachlorobiphenyl	85		30 - 150
DCB Decachlorobiphenyl	77		30 - 150

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Method: 8082 - Polychlorinated Biphenyls (GC/ECD) (Continued)

Lab Sample ID: MB 480-140916/1-A

Matrix: Water

Analysis Batch: 141006

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 140916

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.250		0.250	0.100	ug/L		09/24/13 14:50	09/25/13 07:56	1
PCB-1221	<0.250		0.250	0.100	ug/L		09/24/13 14:50	09/25/13 07:56	1
PCB-1232	<0.250		0.250	0.100	ug/L		09/24/13 14:50	09/25/13 07:56	1
PCB-1242	<0.250		0.250	0.100	ug/L		09/24/13 14:50	09/25/13 07:56	1
PCB-1248	<0.250		0.250	0.100	ug/L		09/24/13 14:50	09/25/13 07:56	1
PCB-1254	<0.250		0.250	0.100	ug/L		09/24/13 14:50	09/25/13 07:56	1
PCB-1260	<0.250		0.250	0.100	ug/L		09/24/13 14:50	09/25/13 07:56	1
PCB-1262	<0.250		0.250	0.100	ug/L		09/24/13 14:50	09/25/13 07:56	1
PCB-1268	<0.250		0.250	0.100	ug/L		09/24/13 14:50	09/25/13 07:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	76		30 - 150	09/24/13 14:50	09/25/13 07:56	1
DCB Decachlorobiphenyl	46		30 - 150	09/24/13 14:50	09/25/13 07:56	1

Lab Sample ID: LCS 480-140916/2-A

Matrix: Water

Analysis Batch: 141006

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 140916

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.957		ug/L		99	40 - 140
PCB-1260	4.00	3.888		ug/L		97	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	81		30 - 150
DCB Decachlorobiphenyl	79		30 - 150

Lab Sample ID: LCSD 480-140916/3-A

Matrix: Water

Analysis Batch: 141006

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 140916

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	4.00	3.715		ug/L		93	40 - 140	6	20
PCB-1260	4.00	3.215		ug/L		80	40 - 140	19	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	76		30 - 150
DCB Decachlorobiphenyl	72		30 - 150

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

GC Semi VOA

Prep Batch: 102228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-18	WCSS-29-(0-0.25)	Total/NA	Solid	3540C	
480-45969-19	WCSS-30-(0-0.25)	Total/NA	Solid	3540C	
480-45969-21	WCSS-32-(0-0.25)	Total/NA	Solid	3540C	
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	3540C	
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	3540C	
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	3540C	
480-45969-25	WCSS-36-(0-0.25)	Total/NA	Solid	3540C	
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	3540C	
480-45969-29	WCSS-41-(0-0.25)	Total/NA	Solid	3540C	
480-45969-30	WCSS-43-(0-0.25)	Total/NA	Solid	3540C	
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	3540C	
480-45969-32	WCSS-45-(0-0.25)	Total/NA	Solid	3540C	
480-45969-36	WCSS-918-(0-0.25)	Total/NA	Solid	3540C	
480-45969-39	WCSS-935-(0-0.25)	Total/NA	Solid	3540C	
LCS 240-102228/24-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-102228/25-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-102228/23-A	Method Blank	Total/NA	Solid	3540C	

Prep Batch: 102245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-1	WCSS-11-(0-0.25)	Total/NA	Solid	3540C	
480-45969-2	WCSS-13-(0-0.25)	Total/NA	Solid	3540C	
480-45969-6	WCSS-18-(0-0.25)	Total/NA	Solid	3540C	
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	3540C	
480-45969-8	WCSS-19-(0-0.25)	Total/NA	Solid	3540C	
480-45969-9	WCSS-20-(0-0.25)	Total/NA	Solid	3540C	
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	3540C	
480-45969-11	WCSS-22-(0-0.25)	Total/NA	Solid	3540C	
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	3540C	
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	3540C	
480-45969-14	WCSS-24-(0-0.25)	Total/NA	Solid	3540C	
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	3540C	
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	3540C	
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	3540C	
LCS 240-102245/24-A	Lab Control Sample	Total/NA	Solid	3540C	
LCSD 240-102245/25-A	Lab Control Sample Dup	Total/NA	Solid	3540C	
MB 240-102245/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 102598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-1	WCSS-11-(0-0.25)	Total/NA	Solid	8082	102245
480-45969-2	WCSS-13-(0-0.25)	Total/NA	Solid	8082	102245
480-45969-6	WCSS-18-(0-0.25)	Total/NA	Solid	8082	102245
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	8082	102245
480-45969-8	WCSS-19-(0-0.25)	Total/NA	Solid	8082	102245
480-45969-9	WCSS-20-(0-0.25)	Total/NA	Solid	8082	102245
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	8082	102245
480-45969-11	WCSS-22-(0-0.25)	Total/NA	Solid	8082	102245
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	8082	102245
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	8082	102245
480-45969-14	WCSS-24-(0-0.25)	Total/NA	Solid	8082	102245

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

GC Semi VOA (Continued)

Analysis Batch: 102598 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	8082	102245
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	8082	102245
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	8082	102245
LCSD 240-102245/25-A	Lab Control Sample Dup	Total/NA	Solid	8082	102245
MB 240-102245/23-A	Method Blank	Total/NA	Solid	8082	102245

Analysis Batch: 102599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-18	WCSS-29-(0-0.25)	Total/NA	Solid	8082	102228
480-45969-19	WCSS-30-(0-0.25)	Total/NA	Solid	8082	102228
480-45969-21	WCSS-32-(0-0.25)	Total/NA	Solid	8082	102228
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	8082	102228
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	8082	102228
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	8082	102228
480-45969-25	WCSS-36-(0-0.25)	Total/NA	Solid	8082	102228
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	8082	102228
480-45969-29	WCSS-41-(0-0.25)	Total/NA	Solid	8082	102228
LCS 240-102228/24-A	Lab Control Sample	Total/NA	Solid	8082	102228
LCSD 240-102228/25-A	Lab Control Sample Dup	Total/NA	Solid	8082	102228
MB 240-102228/23-A	Method Blank	Total/NA	Solid	8082	102228

Analysis Batch: 102804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-102245/24-A	Lab Control Sample	Total/NA	Solid	8082	102245

Analysis Batch: 103077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-30	WCSS-43-(0-0.25)	Total/NA	Solid	8082	102228
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	8082	102228
480-45969-32	WCSS-45-(0-0.25)	Total/NA	Solid	8082	102228
480-45969-36	WCSS-918-(0-0.25)	Total/NA	Solid	8082	102228
480-45969-39	WCSS-935-(0-0.25)	Total/NA	Solid	8082	102228

Prep Batch: 140916

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-37	WCEB-27-(0-0.25)	Total/NA	Water	3510C	
LCS 480-140916/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-140916/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-140916/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 141006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-37	WCEB-27-(0-0.25)	Total/NA	Water	8082	140916
LCS 480-140916/2-A	Lab Control Sample	Total/NA	Water	8082	140916
LCSD 480-140916/3-A	Lab Control Sample Dup	Total/NA	Water	8082	140916
MB 480-140916/1-A	Method Blank	Total/NA	Water	8082	140916

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

General Chemistry

Analysis Batch: 102241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-36	WCSS-918-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-39	WCSS-935-(0-0.25)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-11-(0-0.25)

Lab Sample ID: 480-45969-1

Date Collected: 09/16/13 12:00

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		20	102598	09/24/13 03:33	LSH	TAL CAN
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN

Client Sample ID: WCSS-13-(0-0.25)

Lab Sample ID: 480-45969-2

Date Collected: 09/16/13 11:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN
Total/NA	Analysis	8082		2	102598	09/24/13 03:49	LSH	TAL CAN

Client Sample ID: WCSS-18-(0-0.25)

Lab Sample ID: 480-45969-6

Date Collected: 09/16/13 11:00

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN
Total/NA	Analysis	8082		5	102598	09/24/13 04:04	LSH	TAL CAN

Client Sample ID: WCSS-17-(0-0.25)

Lab Sample ID: 480-45969-7

Date Collected: 09/16/13 12:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN
Total/NA	Analysis	8082		5	102598	09/24/13 04:32	LSH	TAL CAN

Client Sample ID: WCSS-19-(0-0.25)

Lab Sample ID: 480-45969-8

Date Collected: 09/16/13 12:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN
Total/NA	Analysis	8082		5	102598	09/24/13 04:48	LSH	TAL CAN

Client Sample ID: WCSS-20-(0-0.25)

Lab Sample ID: 480-45969-9

Date Collected: 09/16/13 12:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		5	102598	09/24/13 05:03	LSH	TAL CAN
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-21-(0-0.25)

Lab Sample ID: 480-45969-10

Date Collected: 09/16/13 11:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN
Total/NA	Analysis	8082		5	102598	09/24/13 05:18	LSH	TAL CAN

Client Sample ID: WCSS-22-(0-0.25)

Lab Sample ID: 480-45969-11

Date Collected: 09/16/13 10:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		20	102598	09/24/13 16:01	LSH	TAL CAN
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN

Client Sample ID: WCSS-23-(0-0.25)

Lab Sample ID: 480-45969-12

Date Collected: 09/16/13 13:10

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN
Total/NA	Analysis	8082		10	102598	09/24/13 06:19	LSH	TAL CAN

Client Sample ID: WCSS-25-(0-0.25)

Lab Sample ID: 480-45969-13

Date Collected: 09/16/13 13:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN
Total/NA	Analysis	8082		500	102598	09/24/13 16:16	LSH	TAL CAN

Client Sample ID: WCSS-24-(0-0.25)

Lab Sample ID: 480-45969-14

Date Collected: 09/16/13 12:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN
Total/NA	Analysis	8082		20	102598	09/24/13 06:49	LSH	TAL CAN

Client Sample ID: WCSS-26-(0-0.25)

Lab Sample ID: 480-45969-15

Date Collected: 09/16/13 14:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	102598	09/24/13 07:04	LSH	TAL CAN

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-26-(0-0.25)

Lab Sample ID: 480-45969-15

Date Collected: 09/16/13 14:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN

Client Sample ID: WCSS-27-(0-0.25)

Lab Sample ID: 480-45969-16

Date Collected: 09/16/13 14:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN
Total/NA	Analysis	8082		2	102598	09/24/13 07:19	LSH	TAL CAN

Client Sample ID: WCSS-28-(0-0.25)

Lab Sample ID: 480-45969-17

Date Collected: 09/16/13 13:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102245	09/20/13 10:20	MPM	TAL CAN
Total/NA	Analysis	8082		2	102598	09/24/13 07:35	LSH	TAL CAN

Client Sample ID: WCSS-29-(0-0.25)

Lab Sample ID: 480-45969-18

Date Collected: 09/16/13 14:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN
Total/NA	Analysis	8082		50	102599	09/24/13 03:54	LSH	TAL CAN

Client Sample ID: WCSS-30-(0-0.25)

Lab Sample ID: 480-45969-19

Date Collected: 09/16/13 14:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN
Total/NA	Analysis	8082		10	102599	09/24/13 04:09	LSH	TAL CAN

Client Sample ID: WCSS-32-(0-0.25)

Lab Sample ID: 480-45969-21

Date Collected: 09/16/13 14:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN
Total/NA	Analysis	8082		1	102599	09/24/13 04:23	LSH	TAL CAN

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-33-(0-0.25)

Lab Sample ID: 480-45969-22

Date Collected: 09/16/13 15:20

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN
Total/NA	Analysis	8082		10	102599	09/24/13 04:38	LSH	TAL CAN

Client Sample ID: WCSS-34-(0-0.25)

Lab Sample ID: 480-45969-23

Date Collected: 09/16/13 15:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN
Total/NA	Analysis	8082		10	102599	09/24/13 04:53	LSH	TAL CAN

Client Sample ID: WCSS-35-(0-0.25)

Lab Sample ID: 480-45969-24

Date Collected: 09/16/13 15:50

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN
Total/NA	Analysis	8082		5	102599	09/24/13 05:08	LSH	TAL CAN

Client Sample ID: WCSS-36-(0-0.25)

Lab Sample ID: 480-45969-25

Date Collected: 09/16/13 15:05

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN
Total/NA	Analysis	8082		10	102599	09/24/13 05:23	LSH	TAL CAN

Client Sample ID: WCSS-40-(0-0.25)

Lab Sample ID: 480-45969-28

Date Collected: 09/16/13 08:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN
Total/NA	Analysis	8082		10	102599	09/24/13 05:38	LSH	TAL CAN

Client Sample ID: WCSS-41-(0-0.25)

Lab Sample ID: 480-45969-29

Date Collected: 09/16/13 09:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN
Total/NA	Analysis	8082		100	102599	09/24/13 05:53	LSH	TAL CAN

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-43-(0-0.25)

Lab Sample ID: 480-45969-30

Date Collected: 09/16/13 09:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 98.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN
Total/NA	Analysis	8082		500	103077	09/26/13 13:50	LSH	TAL CAN

Client Sample ID: WCSS-44-(0-0.25)

Lab Sample ID: 480-45969-31

Date Collected: 09/16/13 15:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 99.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN
Total/NA	Analysis	8082		20	103077	09/26/13 14:05	LSH	TAL CAN

Client Sample ID: WCSS-45-(0-0.25)

Lab Sample ID: 480-45969-32

Date Collected: 09/16/13 09:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		10	103077	09/26/13 14:20	LSH	TAL CAN
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN

Client Sample ID: WCSS-918-(0-0.25)

Lab Sample ID: 480-45969-36

Date Collected: 09/16/13 11:00

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN
Total/NA	Analysis	8082		10	103077	09/26/13 14:35	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	102241	09/20/13 12:46	RPP	TAL CAN

Client Sample ID: WCEB-27-(0-0.25)

Lab Sample ID: 480-45969-37

Date Collected: 09/16/13 14:25

Matrix: Water

Date Received: 09/18/13 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			140916	09/24/13 14:50	TRG	TAL BUF
Total/NA	Analysis	8082		1	141006	09/25/13 08:41	JMM	TAL BUF

Client Sample ID: WCSS-935-(0-0.25)

Lab Sample ID: 480-45969-39

Date Collected: 09/16/13 15:00

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			102228	09/20/13 09:23	MPM	TAL CAN

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Client Sample ID: WCSS-935-(0-0.25)
Date Collected: 09/16/13 15:00
Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-39
Matrix: Solid
Percent Solids: 93.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		5	103077	09/26/13 14:51	LSH	TAL CAN
Total/NA	Analysis	Moisture		1	102241	09/20/13 12:46	RPP	TAL CAN

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	10-06-13
California	NELAP	9	1169CA	09-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	09-30-13
Wisconsin	State Program	5	998310390	08-31-14

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14 *
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-14 *
Texas	NELAP	6		08-31-14 *

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Laboratory: TestAmerica Canton (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-14
Wisconsin	State Program	5	999518190	08-31-14

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL CAN
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL BUF
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-45969-1	WCSS-11-(0-0.25)	Solid	09/16/13 12:00	09/18/13 01:30
480-45969-2	WCSS-13-(0-0.25)	Solid	09/16/13 11:45	09/18/13 01:30
480-45969-6	WCSS-18-(0-0.25)	Solid	09/16/13 11:00	09/18/13 01:30
480-45969-7	WCSS-17-(0-0.25)	Solid	09/16/13 12:25	09/18/13 01:30
480-45969-8	WCSS-19-(0-0.25)	Solid	09/16/13 12:35	09/18/13 01:30
480-45969-9	WCSS-20-(0-0.25)	Solid	09/16/13 12:45	09/18/13 01:30
480-45969-10	WCSS-21-(0-0.25)	Solid	09/16/13 11:30	09/18/13 01:30
480-45969-11	WCSS-22-(0-0.25)	Solid	09/16/13 10:45	09/18/13 01:30
480-45969-12	WCSS-23-(0-0.25)	Solid	09/16/13 13:10	09/18/13 01:30
480-45969-13	WCSS-25-(0-0.25)	Solid	09/16/13 13:35	09/18/13 01:30
480-45969-14	WCSS-24-(0-0.25)	Solid	09/16/13 12:55	09/18/13 01:30
480-45969-15	WCSS-26-(0-0.25)	Solid	09/16/13 14:55	09/18/13 01:30
480-45969-16	WCSS-27-(0-0.25)	Solid	09/16/13 14:15	09/18/13 01:30
480-45969-17	WCSS-28-(0-0.25)	Solid	09/16/13 13:30	09/18/13 01:30
480-45969-18	WCSS-29-(0-0.25)	Solid	09/16/13 14:15	09/18/13 01:30
480-45969-19	WCSS-30-(0-0.25)	Solid	09/16/13 14:30	09/18/13 01:30
480-45969-21	WCSS-32-(0-0.25)	Solid	09/16/13 14:45	09/18/13 01:30
480-45969-22	WCSS-33-(0-0.25)	Solid	09/16/13 15:20	09/18/13 01:30
480-45969-23	WCSS-34-(0-0.25)	Solid	09/16/13 15:45	09/18/13 01:30
480-45969-24	WCSS-35-(0-0.25)	Solid	09/16/13 15:50	09/18/13 01:30
480-45969-25	WCSS-36-(0-0.25)	Solid	09/16/13 15:05	09/18/13 01:30
480-45969-28	WCSS-40-(0-0.25)	Solid	09/16/13 08:35	09/18/13 01:30
480-45969-29	WCSS-41-(0-0.25)	Solid	09/16/13 09:55	09/18/13 01:30
480-45969-30	WCSS-43-(0-0.25)	Solid	09/16/13 09:45	09/18/13 01:30
480-45969-31	WCSS-44-(0-0.25)	Solid	09/16/13 15:25	09/18/13 01:30
480-45969-32	WCSS-45-(0-0.25)	Solid	09/16/13 09:30	09/18/13 01:30
480-45969-36	WCSS-918-(0-0.25)	Solid	09/16/13 11:00	09/18/13 01:30
480-45969-37	WCEB-27-(0-0.25)	Water	09/16/13 14:25	09/18/13 01:30
480-45969-39	WCSS-935-(0-0.25)	Solid	09/16/13 15:00	09/18/13 01:30

TestAmerica Buffalo

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAir
THE LEADER IN EN



480-45969 Chain of Custody

TAL-4124 (1007)

Client <u>Woodard & Curran</u>			Project Manager <u>Andrea Hevey</u>			Date <u>9/16/13</u>			Chain of Custody Number <u>238333</u>		
Address <u>95 Cedar St, Ste 100</u>			Telephone Number (Area Code)/Fax Number <u>401-273-1007</u> <u>ahavey@woodardcurran.com</u>			Lab Number			Page <u>1</u> of <u>5</u>		
City <u>Providence</u>	State <u>RI</u>	Zip Code <u>02903</u>	Site Contact <u>Andrea Hevey</u>		Lab Contact <u>Becky Mason</u>		Analysis (Attach list if more space is needed)			Special Instructions/ Conditions of Receipt	
Project Name and Location (State) <u>Quincy - Intervale, Quincy, MA</u>			Carrier/Waybill Number								
Contract/Purchase Order/Quote No.											

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives												
			Air	Aqueous	Sed	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	MEOH	PCBs (8-82, Soxhlet)	MCP 14 Metals	VCL (8-60)	VPH (MADER)	EPH (MADER)	TCLP Metals	
<u>WCSS-11-(0.25-0.75)</u>	<u>9/16/13</u>					X	X							X	X			X		(PS) * Fractions only for VPH
<u>WCSS-13-(0.25-0.75)</u>						X	X							X	X			X		(PS) * TCLP analysis maybe needed pending analytical results. Contact the PM with preliminary metal data for TCLP analysis determination. HOLD TCLP analyses
<u>WCSS-11-(0-0.25)</u>	<u>9/16/13</u>	<u>1200</u>				X	X							X	X			X		(PS)
<u>WCSS-13-(0-0.25)</u>		<u>1145</u>				X	X							X	X			X		(PS)
<u>WCSS-14-(0-0.25)</u>		<u>1150</u>				X	X								X					
<u>WCSS-15-(0-0.25)</u>		<u>1135</u>				X	X								X					
<u>WCSS-16-(0-0.25)</u>		<u>1105</u>				X	X								X					
<u>WCSS-18-(0-0.25)</u>		<u>1100</u>				X	X							X	X					
<u>WCSS-17-(0-0.25)</u>		<u>1225</u>				X	X							X	X	X	X	X		
<u>WCSS-19-(0-0.25)</u>		<u>1235</u>				X	X							X	X					

Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown			Sample Disposal <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			(A fee may be assessed if samples are retained longer than 1 month)							
Turn Around Time Required <input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input checked="" type="checkbox"/> Other <u>5 days</u>			QC Requirements (Specify) <u>CAM methods required, report to MCP S-1 standards</u> <u>GIS key & excel file with PDF report</u>										
1. Relinquished By <u>Edward V. Rider</u>			Date <u>9/16/13</u>		Time <u>10:00</u>		1. Received By <u>[Signature]</u>			Date <u>9/17/13</u>		Time <u>10:30</u>	
2. Relinquished By <u>M.C. TAL</u>			Date <u>9/17/13</u>		Time <u>16:00</u>		2. Received By <u>[Signature]</u>			Date <u>9-18-13</u>		Time <u>0150</u>	
3. Relinquished By			Date		Time		3. Received By			Date		Time	

Comments _____

3.7, 3.1, 3.6 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy



Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client <u>Woodward & Curran</u>			Project Manager <u>Andrea Hevey</u>			Date <u>9/16/13</u>		Chain of Custody Number <u>238334</u>		
Address <u>95 Cedar St, Ste 100</u>			Telephone Number (Area Code)/Fax Number <u>401-273-1007, ahevey@woodwardcurran.com</u>			Lab Number		Page <u>2</u> of <u>5</u>		
City <u>Providence</u>	State <u>RI</u>	Zip Code	Site Contact <u>Andrea Hevey</u>	Lab Contact <u>Becky Mason</u>	Analysis (Attach list if more space is needed)					
Project Name and Location (State) <u>Quincy-Intervale, Quincy, MA</u>			Carrier/Waybill Number			Special Instructions/ Conditions of Receipt				
Contract/Purchase Order/Quote No.										

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives										Analysis (Attach list if more space is needed)									
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	MEOH	PCBs (80)	HCP 14	VOCs (8260)						VPH (Na DFP)	EPH (Na DFP)	TCLP Metals		
WCSS-20-(0-0.25)	9/16/13	1245				X	X							X	X											*Fractions only for VPH
WCSS-21-(0-0.25)		1130				X	X							X	X	X	X	X								*TCLP analysis may be needed pending analytical results. Contact the PM with preliminary metals data for TCLP analysis determination. HOLD
WCSS-22-(0-0.25)		1045				X	X							X	X											
WCSS-23-(0-0.25)		1310				X	X							X	X	X	X	X								
WCSS-25-(0-0.25)		1335				X	X							X	X	X	X	X								
WCSS-23-(0.25-0.75)							X	X							X	X			X							
WCSS-23-(0.75-1.0)							X	X							X	X			X							
WCSS-24-(0-0.25)			1255				X	X							X	X										
WCSS-24-(0.25-0.75)							X	X							X	X			X							
WCSS-24-(0.75-1.0)							X	X							X	X			X							
WCSS-26-(0-0.25)	✓	1445				X	X							X	X	X	X	X								
WCSS-27-(0-0.25)		1415				X	X							X	X	X	X	X								

Possible Hazard Identification			Sample Disposal			(A fee may be assessed if samples are retained longer than 1 month)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months	
Turn Around Time Required			QC Requirements (Specify)					
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input checked="" type="checkbox"/> Other <u>5 day</u>	CAM methods required, report to MCP S-1 standards GISKey & excel file with PDF report		
1. Relinquished By <u>Brent V. (signature)</u>			Date <u>9/17/13</u> Time <u>1020</u>			1. Received By <u>M.S. (signature)</u> Date <u>9/17/13</u> Time <u>10:00</u>		
2. Relinquished By <u>M.C. (signature)</u>			Date <u>9/17/13</u> Time <u>1600</u>			2. Received By <u>(signature)</u> Date <u>9-18-13</u> Time <u>0130</u>		
3. Relinquished By			Date			3. Received By		

Comments _____

3.7, 3.1, 3.6 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

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9/27/2013



Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client <u>Woodward & Curran</u>			Project Manager <u>Andrica Heury</u>			Date <u>9/16/13</u>		Chain of Custody Number <u>238235</u>	
Address <u>95 Cedar St. Ste 100</u>			Telephone Number (Area Code)/Fax Number <u>401-273-1007, aheury@woodwardcurran.com</u>			Lab Number		Page <u>3</u> of <u>5</u>	
City <u>Providence</u>	State <u>RI</u>	Zip Code <u>02903</u>	Site Contact <u>Andrica Heury</u>		Lab Contact <u>Becky Mason</u>		Analysis (Attach list if more space is needed)		
Project Name and Location (State) <u>Quincy-Intervale, Quincy, MA</u>			Carrier/Waybill Number			Special Instructions/ Conditions of Receipt			
Contract/Purchase Order/Quote No.									

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives										Conditions of Receipt																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	HCit	PCB (80)	MCP 14	IDL (8)	VPH (K)	EPH (V)	TCLP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

* Fractions only for VPH
* TCLP analysis may be needed pending analytical results. Contact the PM with preliminary metals data for TCLP analysis determination. HOLD TCLP analyses

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown
 Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 days

1. Relinquished By Barry V. Diogen Date 9/17/13 Time 1020
 2. Relinquished By M C TAL Date 9/17/13 Time 1600
 3. Relinquished By _____ Date _____ Time _____

QC Requirements (Specify) CAM methods required, report to MEP S-1 Standards
GIS key & excel file with PDF report

1. Received By TAL Date 9/17/13 Time 1020
 2. Received By TAL Date 9/16/13 Time 1630
 3. Received By _____ Date _____ Time _____

Comments

3.7, 3.1, 3.6 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client <u>Woodward & Curran</u>			Project Manager <u>Andrea Hevey</u>			Date <u>9/16/13</u>			Chain of Custody Number <u>238336</u>		
Address <u>95 Cedar St, Ste 100</u>			Telephone Number (Area Code)/Fax Number <u>401-273-1007, ahevey@woodwardcurran.com</u>			Lab Number			Page <u>4</u> of <u>5</u>		
City <u>Providence</u>	State <u>RI</u>	Zip Code	Site Contact <u>Andrea Hevey</u>			Lab Contact <u>Becky Mason</u>			Analysis (Attach list if more space is needed)		
Project Name and Location (State) <u>Guincy-Intervale, Guincy, MA</u>			Carrier/Waybill Number						Special Instructions/ Conditions of Receipt		
Contract/Purchase Order/Quote No.											

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives										Analysis (Attach list if more space is needed)									
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Meq	PCB (S&S)	MCPH Metals	VOC (S&S)	VOC (M&P)	EDL (M&P)	TCLP Metals							
WCSS-36-(0-0.25)	9/16/13	1505				X	X							X	X											* Fractions only for VPH
WCSS-38-(0-0.25)		935				X	X								X											* TCLP analysis may be
WCSS-39-(0-0.25)		815				X	X								X											needed pending analytical
WCSS-40-(0-0.25)		835				X	X						X	X	X	X	X	X								results. Contact the PM
WCSS-40-(0.25-0.75)						X	X							X	X				X							with preliminary metals
WCSS-40-(0.75-1.0)						X	X							X	X				X							data for TCLP analysis
WCSS-41-(0-0.25)		955				X	X							X	X											determination. HOLD
WCSS-43-(0-0.25)		945				X	X							X	X											TCLP analyses
WCSS-44-(0-0.25)		1525				X	X						X	X	X	X	X									
WCSS-44-(0.25-0.75)						X	X							X	X				X							
WCSS-44-(0.75-1.0)						X	X							X	X				X							
WCSS-45-(0-0.25)		930				X	X							X	X											

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown
 Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 days
 QC Requirements (Specify) CAM methods required, report to MCP S-1 Standards
GISKey & Excel file with PDF report

1. Relinquished By <u>Brian V. (signature)</u>	Date <u>9/17/13</u>	Time <u>10:00</u>	1. Received By <u>(signature)</u>	Date <u>9/17/13</u>	Time <u>10:00</u>
2. Relinquished By <u>(signature)</u>	Date <u>9/17/13</u>	Time <u>16:00</u>	2. Received By <u>(signature)</u>	Date <u>9/17/13</u>	Time <u>01:30</u>
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

3.7, 3.1, 3.6 #1

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client Woodland & Curran			Project Manager Andrea Hevey			Date 9/16/13		Chain of Custody Number 238337	
Address 95 Cedar St, Ste 100			Telephone Number (Area Code)/Fax Number 401-273-1007, ahevey@woodlandcurran.com			Lab Number		Page 5 of 5	
City Providence		State RI	Zip Code 02903		Site Contact Andrea Hevey		Lab Contact Becky Mason		Analysis (Attach list if more space is needed)
Project Name and Location (State) Quincy-Intervale, Quincy, MA					Carrier/Waybill Number				
Contract/Purchase Order/Quote No.									

Contract/Purchase Order/Quote No.			Matrix				Containers & Preservatives							Conditions of Receipt														
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	PCBs (806)	MCP (141)	VOC (826)	UPH (14)	EPH (14)											
WCSS-46-(0-0.25)	9/16/13	910				X	X							X														
WCSS-47-(0-0.25)	↓	755				X	X							X														
WCSS-48-(0-0.25)		730				X	X							X														
WCSS-47-(0-0.25) MS		755				X	X							X					MS: Matrix Spike									
WCSS-47-(0-0.25) MSD		755				X	X							X					MSD: Matrix Spike Dep									
WCSS-918-(0-0.25)		1100					X	X						X														
WCSS-16-(0-0.25) MS	↓	1105				X	X							X														
WCSS-16-(0-0.25) MSD		1105				X	X							X														
WCEB-27-(0-0.25)		1425	X				X							X														
TB-C9162013	✓	1200	X							X					X													
WCSS-935-(0-0.25)	9/16/13	1550				X	X							X														

Possible Hazard Identification			Sample Disposal			(A fee may be assessed if samples are retained longer than 1 month)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months	
Turn Around Time Required			QC Requirements (Specify)					
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input checked="" type="checkbox"/> Other 5 day	CAM methods required, report to MCP S-1 Standards GIS key & excel file with PDF report		
1. Relinquished By Brent V. Coughlin			Date 9/17/13 Time 1020			1. Received By TAL Date 9/17/13 Time 1020		
2. Relinquished By M.C. TAL			Date 9/17/13 Time 1600			2. Received By TAL Date 9-18-13 Time 0130		
3. Relinquished By			Date			3. Received By		

Comments

3.7, 3.1, 3.6 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy



Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-45969-2

Login Number: 45969

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-45969-1

Client Project/Site: Quincy Inervale

Revision: 1

For:


Woodard & Curran Inc

95 Cedar St

Suite 100

Providence, Rhode Island 02903

Attn: Ms. Andrea Hevey



Authorized for release by:

10/14/2013 12:48:53 PM

Becky Mason, Project Manager II

(413)572-4000

becky.mason@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
L	A negative instrument reading had an absolute value greater than the reporting limit
F	MS/MSD Recovery and/or RPD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Job ID: 480-45969-1

Laboratory: TestAmerica Buffalo

Narrative

Revised report: All soil units that were reporting as ug/Kg have been changed to mg/Kg per client request. This report replaces final report from 9/23/13.

Receipt

The samples were received on 9/18/2013 1:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 3.1° C, 3.6° C and 3.7° C.

The following samples were preserved via freezing on 9/18/2013 at 04:15: WCSS-17-(0-0.25) (480-45969-7), WCSS-21-(0-0.25) (480-45969-10), WCSS-23-(0-0.25) (480-45969-12), WCSS-25-(0-0.25) (480-45969-13), WCSS-26-(0-0.25) (480-45969-15), WCSS-27-(0-0.25) (480-45969-16), WCSS-28-(0-0.25) (480-45969-17), WCSS-33-(0-0.25) (480-45969-22), WCSS-34-(0-0.25) (480-45969-23), WCSS-35-(0-0.25) (480-45969-24), WCSS-40-(0-0.25) (480-45969-28), WCSS-44-(0-0.25) (480-45969-31). This is within the 48 hour timeframe required by the method.

GC/MS VOA

Method 8260C: The continuing calibration verification (CCV) for Acetone, 1,2-Dibromo-3-chloropropane and Dichlorodifluoromethane associated with batch 139838 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.

Method 8260C: The continuing calibration verification (CCV) for 1,4-Dioxane associated with batch 139838 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batches 139971, 140106 and 139838 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample.

Method 8260C: The continuing calibration verification (CCV) for 1,2,3-Trichlorobenzene associated with batch 139971 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.

Method 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 139971 recovered outside control limits for the following analytes: 1,4-Dioxane.

Method 8260C: The method blank for preparation batch 139971 contained Methylene chloride above the reporting limit (RL). MCP protocol allows for common lab contaminants to have positive detections up to 5 times the reporting limit. None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 8260C: The continuing calibration verification (CCV) for Acetone associated with batch 140106 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.

Method 8260C: The continuing calibration verification (CCV) for 1,4-Dioxane associated with batch 140106 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference or 60% difference for difficult analytes.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: WCSS-26-(0-0.25) (480-45969-15). Elevated reporting limits (RLs) are provided.

With the exception of diluted samples and adjustments made for % solids or insufficient sample mass, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-Dibromo-3-Chloropropane, Naphthalene, & Tetrahydrofuran.

No other analytical or quality issues were noted.

GC VOA

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Job ID: 480-45969-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method MAVPH: The dilution for the following sample is based upon a large single peak that falls within the C9-C12 range WCSS-28-(0-0.25) (480-45969-17).

Method MAVPH: The following sample are diluted to bring the concentration of target analytes within the calibration range: WCSS-17-(0-0.25) (480-45969-7), WCSS-25-(0-0.25) (480-45969-13), WCSS-26-(0-0.25) (480-45969-15), WCSS-34-(0-0.25) (480-45969-23), WCSS-44-(0-0.25) (480-45969-31), WCSS-23-(0-0.25) (480-45969-12), WCSS-28-(0-0.25) (480-45969-17). Elevated reporting limits (RLs) are provided.

At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

No other analytical or quality issues were noted.

GC Semi VOA

Method MA-EPH: Surrogate recovery (o-Terphenyl and 1-Chlorooctadecane) in the following samples was outside control limits: WCSS-21-(0-0.25) (480-45969-10), WCSS-23-(0-0.25) (480-45969-12), WCSS-28-(0-0.25) (480-45969-17), WCSS-33-(0-0.25) (480-45969-22), WCSS-40-(0-0.25) (480-45969-28). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method MA-EPH: Surrogate recovery of 1- Chlorooctadecane for the following sample was outside control limits: WCSS-27-(0-0.25) (480-45969-16), WCSS-34-(0-0.25) (480-45969-23). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol; however they do achieve method 1 S1 standards.

No other analytical or quality issues were noted.

Metals

Method 6010: The CRI (CRI 480-139946/8) exhibited a result outside the project established control limits for total lead. However, the result was within TestAmerica's standard quality control limits, therefore no corrective action was necessary.

Method 6010: The ICSA (ICSA 480-139946/9) exhibited a result outside the project established control limits for total antimony. However, the result was within TestAmerica's standard quality control limits, therefore no corrective action was necessary.

Method 6010: The Method Blank for batch 480-139644 contained total zinc above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples WCSS-30-(0-0.25) (480-45969-19), WCSS-31-(0-0.25) (480-45969-20), WCSS-32-(0-0.25) (480-45969-21), WCSS-33-(0-0.25) (480-45969-22), WCSS-34-(0-0.25) (480-45969-23), WCSS-35-(0-0.25) (480-45969-24), WCSS-36-(0-0.25) (480-45969-25), WCSS-38-(0-0.25) (480-45969-26), WCSS-39-(0-0.25) (480-45969-27), WCSS-40-(0-0.25) (480-45969-28), WCSS-41-(0-0.25) (480-45969-29), WCSS-43-(0-0.25) (480-45969-30), WCSS-44-(0-0.25) (480-45969-31), WCSS-45-(0-0.25) (480-45969-32), WCSS-46-(0-0.25) (480-45969-33), WCSS-47-(0-0.25) (480-45969-34), WCSS-48-(0-0.25) (480-45969-35) was not performed.

Method 6010: The method blank for batch 480-139644 contained total selenium above the client detection limit. This target analyte concentration was less than the laboratory standard reporting limit (RL); therefore, re-extraction and/or re-analysis of samples WCSS-30-(0-0.25) (480-45969-19), WCSS-31-(0-0.25) (480-45969-20), WCSS-32-(0-0.25) (480-45969-21), WCSS-33-(0-0.25) (480-45969-22), WCSS-34-(0-0.25) (480-45969-23), WCSS-35-(0-0.25) (480-45969-24), WCSS-36-(0-0.25) (480-45969-25), WCSS-38-(0-0.25) (480-45969-26), WCSS-39-(0-0.25) (480-45969-27), WCSS-40-(0-0.25) (480-45969-28), WCSS-41-(0-0.25) (480-45969-29), WCSS-43-(0-0.25) (480-45969-30), WCSS-44-(0-0.25) (480-45969-31), WCSS-45-(0-0.25) (480-45969-32), WCSS-46-(0-0.25) (480-45969-33), WCSS-47-(0-0.25) (480-45969-34), WCSS-48-(0-0.25) (480-45969-35) was not performed.

Method 6010: The Matrix Spike Duplicate (WCSS-47-(0-0.25) MSD (480-45969-34 MSD)) recoveries for total lead and zinc in batch 480-139644 were outside control limits. Sample matrix is suspected. The associated Laboratory Control Sample (LCS) met acceptance criteria, therefore no corrective action was necessary.

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Job ID: 480-45969-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method 6010: The following sample was diluted due to the presence of total iron which interferes with silver, nickel, lead, and vanadium: WCSS-36-(0-0.25) (480-45969-25). Elevated reporting limits (RLs) are provided.

Method 6010: The following samples was diluted to bring the concentration of target analyte total zinc within the linear range of the instrument: WCSS-41-(0-0.25) (480-45969-29), WCSS-44-(0-0.25) (480-45969-31), WCSS-46-(0-0.25) (480-45969-33), WCSS-11-(0-0.25) (480-45969-1), WCSS-18-(0-0.25) (480-45969-6). Elevated reporting limits (RLs) are provided.

Method 6010: The following sample was diluted due to the presence of total iron which interferes with silver, nickel, lead, and vanadium: WCSS-44-(0-0.25) (480-45969-31), WCSS-27-(0-0.25) (480-45969-16). Elevated reporting limits (RLs) are provided.

Method 6010: The CRI (CRI 480-139953/8) exhibited a result outside the project established control limits for total lead. However, the result was within TestAmerica's standard quality control limits, therefore no corrective action was necessary.

Method 6010: The ICSA (ICSA 480-139953/9) exhibited a result outside the project established control limits for total antimony. However, the result was within TestAmerica's standard quality control limits, therefore no corrective action was necessary.

Method 6010: The Method Blank for batch 480-139642 contained total zinc above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples WCSS-11-(0-0.25) (480-45969-1), WCSS-13-(0-0.25) (480-45969-2), WCSS-14-(0-0.25) (480-45969-3), WCSS-15-(0-0.25) (480-45969-4), WCSS-16-(0-0.25) (480-45969-5), WCSS-17-(0-0.25) (480-45969-7), WCSS-18-(0-0.25) (480-45969-6), WCSS-19-(0-0.25) (480-45969-8), WCSS-20-(0-0.25) (480-45969-9), WCSS-21-(0-0.25) (480-45969-10), WCSS-22-(0-0.25) (480-45969-11), WCSS-23-(0-0.25) (480-45969-12), WCSS-24-(0-0.25) (480-45969-14), WCSS-25-(0-0.25) (480-45969-13), WCSS-26-(0-0.25) (480-45969-15), WCSS-27-(0-0.25) (480-45969-16), WCSS-28-(0-0.25) (480-45969-17), WCSS-29-(0-0.25) (480-45969-18) was not performed.

Method 6010: The Serial Dilution (480-45969-5 SD) in batch 480-139642, exhibited a result outside the quality control limits for total barium. However, the Post Digestion Spike was compliant so no corrective action was necessary.

Method 6010: The Matrix Spike/ Matrix Spike Duplicate (WCSS-16-(0-0.25) MS (480-45969-5 MS), WCSS-16-(0-0.25) MSD (480-45969-5 MSD)) recoveries for total barium and chromium in batch 480-139642 were outside control limits. Sample matrix is suspected. The associated Laboratory Control Sample (LCS) met acceptance criteria, therefore no corrective action was necessary.

Method 6010: The Matrix Spike / Matrix Spike Duplicate (WCSS-16-(0-0.25) MS (480-45969-5 MS), WCSS-16-(0-0.25) MSD (480-45969-5 MSD)) precision for batch 480-139642 was outside control limits for total barium, chromium, and lead. Non-homogeneity of the sample matrix is suspected. The associated Laboratory Control Sample met acceptance criteria, therefore, no corrective action was necessary.

Method 6010: The following sample was diluted to bring the concentration of target analytes total barium, lead, and zinc within the linear range of the instrument: WCSS-23-(0-0.25) (480-45969-12). Elevated reporting limits (RLs) are provided.

Method 6010: The following sample was diluted due to the presence of total iron which interferes with silver, nickel, lead, and vanadium: WCSS-27-(0-0.25) (480-45969-16). Elevated reporting limits (RLs) are provided.

Method 7471A: The following samples were diluted to bring the concentration of the target analyte total mercury within the calibration range: WCSS-11-(0-0.25) (480-45969-1), WCSS-13-(0-0.25) (480-45969-2), WCSS-14-(0-0.25) (480-45969-3), WCSS-15-(0-0.25) (480-45969-4), WCSS-16-(0-0.25) (480-45969-5), WCSS-18-(0-0.25) (480-45969-6), WCSS-20-(0-0.25) (480-45969-9), WCSS-21-(0-0.25) (480-45969-10), WCSS-22-(0-0.25) (480-45969-11), WCSS-23-(0-0.25) (480-45969-12), WCSS-24-(0-0.25) (480-45969-14), WCSS-25-(0-0.25) (480-45969-13), WCSS-29-(0-0.25) (480-45969-18), WCSS-33-(0-0.25) (480-45969-22), WCSS-34-(0-0.25) (480-45969-23), WCSS-36-(0-0.25) (480-45969-25), WCSS-40-(0-0.25) (480-45969-28), WCSS-41-(0-0.25) (480-45969-29), WCSS-43-(0-0.25) (480-45969-30), WCSS-44-(0-0.25) (480-45969-31), WCSS-45-(0-0.25) (480-45969-32), WCSS-46-(0-0.25) (480-45969-33). Elevated reporting limits (RLs) are provided.

Method 7471A: The Matrix Spike/ Matrix Spike Duplicate (MS/MSD) recoveries for total mercury in batch 139623 were outside control limits. The associated Laboratory Control Sample (LCS) recovery met acceptance criteria, therefore no corrective action was necessary.

Method 7471A: The CRA 480-139797/104 exhibited results below the project established control limits for total mercury. However, the results were within TestAmerica's standard quality control limits, therefore no corrective action was necessary.

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Job ID: 480-45969-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

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MassDEP Analytical Protocol Certification Form					
Laboratory Name: TestAmerica Buffalo		Project #: 480-45969-1			
Project Location: Quincy		RTN:			
This form provides certifications for the following data set: list Laboratory Sample ID Number(s): 480-45969-1[1-39-]					
Matrices: <input type="checkbox"/> Groundwater/Surface Water <input checked="" type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
CAM Protocols (check all that apply below):					
8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input checked="" type="checkbox"/>	Mass DEP VPH CAM IV A <input checked="" type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	6010 Metals CAM III C <input checked="" type="checkbox"/>	Mass DEP EPH CAM IV B <input checked="" type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input type="checkbox"/>	9014 Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Responses to Questions G, H and I below are required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
¹ All negative responses must be addressed in an attached laboratory narrative.					
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.					
Signature:		Position: Project Manager			
Printed Name: Becky Mason		Date: 9/23/13 16:22			
This form has been electronically signed and approved					

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-11-(0-0.25)

Lab Sample ID: 480-45969-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	23.8		1.20	0.481	mg/Kg	1	☼	6010	Total/NA
Barium	384		0.602	0.132	mg/Kg	1	☼	6010	Total/NA
Cadmium	9.17		0.241	0.0361	mg/Kg	1	☼	6010	Total/NA
Chromium	102		0.602	0.241	mg/Kg	1	☼	6010	Total/NA
Silver	1.07		0.602	0.241	mg/Kg	1	☼	6010	Total/NA
Lead	986	^	0.602	0.289	mg/Kg	1	☼	6010	Total/NA
Selenium	3.28		0.602	0.481	mg/Kg	1	☼	6010	Total/NA
Antimony	1.96	^	0.602	0.481	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.603		0.241	0.0337	mg/Kg	1	☼	6010	Total/NA
Nickel	495		1.20	0.277	mg/Kg	1	☼	6010	Total/NA
Vanadium	54.0		0.602	0.132	mg/Kg	1	☼	6010	Total/NA
Zinc	2820	B	6.02	0.368	mg/Kg	2	☼	6010	Total/NA
Mercury	1.77		0.549	0.0444	mg/Kg	5	☼	7471A	Total/NA

Client Sample ID: WCSS-13-(0-0.25)

Lab Sample ID: 480-45969-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.22		1.26	0.506	mg/Kg	1	☼	6010	Total/NA
Barium	73.3		0.632	0.139	mg/Kg	1	☼	6010	Total/NA
Cadmium	2.77		0.253	0.0379	mg/Kg	1	☼	6010	Total/NA
Chromium	72.8		0.632	0.253	mg/Kg	1	☼	6010	Total/NA
Lead	1320	^	0.632	0.304	mg/Kg	1	☼	6010	Total/NA
Selenium	1.36		0.632	0.506	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.196	J	0.253	0.0354	mg/Kg	1	☼	6010	Total/NA
Thallium	2.04		1.26	0.379	mg/Kg	1	☼	6010	Total/NA
Nickel	79.4		1.26	0.291	mg/Kg	1	☼	6010	Total/NA
Vanadium	291		0.632	0.139	mg/Kg	1	☼	6010	Total/NA
Zinc	742	B	3.16	0.194	mg/Kg	1	☼	6010	Total/NA
Mercury	61.0		11.6	0.943	mg/Kg	100	☼	7471A	Total/NA

Client Sample ID: WCSS-14-(0-0.25)

Lab Sample ID: 480-45969-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.46		1.19	0.477	mg/Kg	1	☼	6010	Total/NA
Barium	60.5		0.596	0.131	mg/Kg	1	☼	6010	Total/NA
Cadmium	7.43		0.238	0.0358	mg/Kg	1	☼	6010	Total/NA
Chromium	15.4		0.596	0.238	mg/Kg	1	☼	6010	Total/NA
Lead	164	^	0.596	0.286	mg/Kg	1	☼	6010	Total/NA
Selenium	1.03		0.596	0.477	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.197	J	0.238	0.0334	mg/Kg	1	☼	6010	Total/NA
Nickel	38.0		1.19	0.274	mg/Kg	1	☼	6010	Total/NA
Vanadium	13.4		0.596	0.131	mg/Kg	1	☼	6010	Total/NA
Zinc	1770	B	2.98	0.182	mg/Kg	1	☼	6010	Total/NA
Mercury	2.27		1.15	0.0933	mg/Kg	10	☼	7471A	Total/NA

Client Sample ID: WCSS-15-(0-0.25)

Lab Sample ID: 480-45969-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	1.81		1.08	0.434	mg/Kg	1	☼	6010	Total/NA
Barium	22.4		0.542	0.119	mg/Kg	1	☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-15-(0-0.25) (Continued)

Lab Sample ID: 480-45969-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Cadmium	0.433		0.217	0.0325	mg/Kg	1		☼	6010	Total/NA
Chromium	11.5		0.542	0.217	mg/Kg	1		☼	6010	Total/NA
Lead	58.9	^	0.542	0.260	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.216	J	0.217	0.0304	mg/Kg	1		☼	6010	Total/NA
Nickel	11.7		1.08	0.249	mg/Kg	1		☼	6010	Total/NA
Vanadium	10.6		0.542	0.119	mg/Kg	1		☼	6010	Total/NA
Zinc	88.1	B	2.71	0.166	mg/Kg	1		☼	6010	Total/NA
Mercury	0.100		0.0941	0.00762	mg/Kg	1		☼	7471A	Total/NA

Client Sample ID: WCSS-16-(0-0.25)

Lab Sample ID: 480-45969-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	4.12		1.09	0.437	mg/Kg	1		☼	6010	Total/NA
Barium	101		0.547	0.120	mg/Kg	1		☼	6010	Total/NA
Cadmium	2.34		0.219	0.0328	mg/Kg	1		☼	6010	Total/NA
Chromium	41.7		0.547	0.219	mg/Kg	1		☼	6010	Total/NA
Lead	484	^	0.547	0.262	mg/Kg	1		☼	6010	Total/NA
Selenium	1.16		0.547	0.437	mg/Kg	1		☼	6010	Total/NA
Antimony	2.50	^	0.547	0.437	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.543		0.219	0.0306	mg/Kg	1		☼	6010	Total/NA
Nickel	50.5		1.09	0.252	mg/Kg	1		☼	6010	Total/NA
Vanadium	19.2		0.547	0.120	mg/Kg	1		☼	6010	Total/NA
Zinc	957	B	2.73	0.167	mg/Kg	1		☼	6010	Total/NA
Mercury	0.868		0.546	0.0442	mg/Kg	5		☼	7471A	Total/NA

Client Sample ID: WCSS-18-(0-0.25)

Lab Sample ID: 480-45969-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	8.70		1.08	0.432	mg/Kg	1		☼	6010	Total/NA
Barium	990		0.540	0.119	mg/Kg	1		☼	6010	Total/NA
Cadmium	13.6		0.216	0.0324	mg/Kg	1		☼	6010	Total/NA
Chromium	54.4		0.540	0.216	mg/Kg	1		☼	6010	Total/NA
Silver	1.29		0.540	0.216	mg/Kg	1		☼	6010	Total/NA
Lead	3400	^	0.540	0.259	mg/Kg	1		☼	6010	Total/NA
Selenium	1.58		0.540	0.432	mg/Kg	1		☼	6010	Total/NA
Antimony	18.5	^	0.540	0.432	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.784		0.216	0.0302	mg/Kg	1		☼	6010	Total/NA
Nickel	130		1.08	0.248	mg/Kg	1		☼	6010	Total/NA
Vanadium	25.1		0.540	0.119	mg/Kg	1		☼	6010	Total/NA
Zinc	3190	B	5.40	0.331	mg/Kg	2		☼	6010	Total/NA
Mercury	72.8		10.8	0.873	mg/Kg	100		☼	7471A	Total/NA

Client Sample ID: WCSS-17-(0-0.25)

Lab Sample ID: 480-45969-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
C5-C8 Aliphatics (adjusted)	0.0845	J	1.40	0.0561	mg/Kg	5		☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.0845	J	1.16	0.0462	mg/Kg	5		☼	MAVPH	Total/NA
C9-C10 Aromatics	1.70		1.16	0.0462	mg/Kg	5		☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	1.23		1.16	0.0462	mg/Kg	5		☼	MAVPH	Total/NA
Anthracene	0.164	J	0.535	0.102	mg/Kg	1		☼	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-17-(0-0.25) (Continued)

Lab Sample ID: 480-45969-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	1.07		0.535	0.0813	mg/Kg	1	✱	MA-EPH	Total/NA
Benzo[a]pyrene	1.49		0.535	0.0770	mg/Kg	1	✱	MA-EPH	Total/NA
Benzo[b]fluoranthene	1.88		0.535	0.0760	mg/Kg	1	✱	MA-EPH	Total/NA
Benzo[g,h,i]perylene	1.22	B	0.535	0.0909	mg/Kg	1	✱	MA-EPH	Total/NA
Benzo[k]fluoranthene	0.890		0.535	0.0781	mg/Kg	1	✱	MA-EPH	Total/NA
Chrysene	1.39		0.535	0.0952	mg/Kg	1	✱	MA-EPH	Total/NA
Dibenz(a,h)anthracene	0.690	B	0.535	0.0749	mg/Kg	1	✱	MA-EPH	Total/NA
Fluoranthene	1.97		0.535	0.0942	mg/Kg	1	✱	MA-EPH	Total/NA
Fluorene	0.180	J	0.535	0.107	mg/Kg	1	✱	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	1.25	B	0.535	0.0781	mg/Kg	1	✱	MA-EPH	Total/NA
Phenanthrene	1.06	B	0.535	0.107	mg/Kg	1	✱	MA-EPH	Total/NA
Pyrene	1.93		0.535	0.0974	mg/Kg	1	✱	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	51.4	B	5.35	2.14	mg/Kg	1	✱	MA-EPH	Total/NA
C19-C36 Aliphatics	21.2		5.35	2.14	mg/Kg	1	✱	MA-EPH	Total/NA
C9-C18 Aliphatics	2.16	J	5.35	2.14	mg/Kg	1	✱	MA-EPH	Total/NA
Arsenic	3.68		1.14	0.456	mg/Kg	1	✱	6010	Total/NA
Barium	30.4		0.570	0.125	mg/Kg	1	✱	6010	Total/NA
Cadmium	0.199	J	0.228	0.0342	mg/Kg	1	✱	6010	Total/NA
Chromium	8.24		0.570	0.228	mg/Kg	1	✱	6010	Total/NA
Lead	99.4	^	0.570	0.274	mg/Kg	1	✱	6010	Total/NA
Beryllium	0.228		0.228	0.0319	mg/Kg	1	✱	6010	Total/NA
Nickel	6.94		1.14	0.262	mg/Kg	1	✱	6010	Total/NA
Vanadium	16.7		0.570	0.125	mg/Kg	1	✱	6010	Total/NA
Zinc	68.4	B	2.85	0.174	mg/Kg	1	✱	6010	Total/NA
Mercury	0.0836	J	0.115	0.00930	mg/Kg	1	✱	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	36.2		5.61	5.61	mg/Kg	1	✱	MA-EPH	Total/NA

Client Sample ID: WCSS-19-(0-0.25)

Lab Sample ID: 480-45969-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.08		1.14	0.455	mg/Kg	1	✱	6010	Total/NA
Barium	65.3		0.569	0.125	mg/Kg	1	✱	6010	Total/NA
Cadmium	0.697		0.227	0.0341	mg/Kg	1	✱	6010	Total/NA
Chromium	12.5		0.569	0.227	mg/Kg	1	✱	6010	Total/NA
Lead	239	^	0.569	0.273	mg/Kg	1	✱	6010	Total/NA
Beryllium	0.803		0.227	0.0318	mg/Kg	1	✱	6010	Total/NA
Nickel	15.1		1.14	0.262	mg/Kg	1	✱	6010	Total/NA
Vanadium	20.9		0.569	0.125	mg/Kg	1	✱	6010	Total/NA
Zinc	213	B	2.84	0.174	mg/Kg	1	✱	6010	Total/NA
Mercury	0.363		0.0979	0.00793	mg/Kg	1	✱	7471A	Total/NA

Client Sample ID: WCSS-20-(0-0.25)

Lab Sample ID: 480-45969-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	29.8		1.16	0.465	mg/Kg	1	✱	6010	Total/NA
Barium	310		0.581	0.128	mg/Kg	1	✱	6010	Total/NA
Cadmium	18.5		0.232	0.0349	mg/Kg	1	✱	6010	Total/NA
Chromium	48.0		0.581	0.232	mg/Kg	1	✱	6010	Total/NA
Silver	0.714		0.581	0.232	mg/Kg	1	✱	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-20-(0-0.25) (Continued)

Lab Sample ID: 480-45969-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Lead	3280	^	0.581	0.279	mg/Kg	1		✱	6010	Total/NA
Selenium	2.37		0.581	0.465	mg/Kg	1		✱	6010	Total/NA
Antimony	3.56	^	0.581	0.465	mg/Kg	1		✱	6010	Total/NA
Beryllium	1.14		0.232	0.0325	mg/Kg	1		✱	6010	Total/NA
Nickel	256		1.16	0.267	mg/Kg	1		✱	6010	Total/NA
Vanadium	34.8		0.581	0.128	mg/Kg	1		✱	6010	Total/NA
Zinc	1950	B	2.91	0.178	mg/Kg	1		✱	6010	Total/NA
Mercury	3.65		1.11	0.0899	mg/Kg	10		✱	7471A	Total/NA

Client Sample ID: WCSS-21-(0-0.25)

Lab Sample ID: 480-45969-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
C5-C8 Aliphatics (adjusted)	0.0552	J	0.263	0.0105	mg/Kg	1		✱	MA VPH	Total/NA
C9-C12 Aliphatics (adjusted)	0.0591	J	0.263	0.0105	mg/Kg	1		✱	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.0636	J	0.144	0.00576	mg/Kg	1		✱	MAVPH	Total/NA
C9-C10 Aromatics	0.319		0.144	0.00576	mg/Kg	1		✱	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.383		0.144	0.00576	mg/Kg	1		✱	MAVPH	Total/NA
Anthracene	0.193	J	0.495	0.0941	mg/Kg	1		✱	MA-EPH	Total/NA
Benzo[a]anthracene	0.706		0.495	0.0753	mg/Kg	1		✱	MA-EPH	Total/NA
Benzo[a]pyrene	1.17		0.495	0.0713	mg/Kg	1		✱	MA-EPH	Total/NA
Benzo[b]fluoranthene	1.34		0.495	0.0703	mg/Kg	1		✱	MA-EPH	Total/NA
Benzo[g,h,i]perylene	0.876	B	0.495	0.0842	mg/Kg	1		✱	MA-EPH	Total/NA
Benzo[k]fluoranthene	0.652		0.495	0.0723	mg/Kg	1		✱	MA-EPH	Total/NA
Chrysene	0.999		0.495	0.0881	mg/Kg	1		✱	MA-EPH	Total/NA
Dibenz(a,h)anthracene	0.644	B	0.495	0.0693	mg/Kg	1		✱	MA-EPH	Total/NA
Fluoranthene	1.90		0.495	0.0872	mg/Kg	1		✱	MA-EPH	Total/NA
Fluorene	0.163	J	0.495	0.0990	mg/Kg	1		✱	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	0.947	B	0.495	0.0723	mg/Kg	1		✱	MA-EPH	Total/NA
Phenanthrene	0.929	B	0.495	0.0990	mg/Kg	1		✱	MA-EPH	Total/NA
Pyrene	1.27		0.495	0.0901	mg/Kg	1		✱	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	44.8	B	4.95	1.98	mg/Kg	1		✱	MA-EPH	Total/NA
C19-C36 Aliphatics	54.4		4.95	1.98	mg/Kg	1		✱	MA-EPH	Total/NA
C9-C18 Aliphatics	3.73	J	4.95	1.98	mg/Kg	1		✱	MA-EPH	Total/NA
Arsenic	5.91		0.954	0.382	mg/Kg	1		✱	6010	Total/NA
Barium	75.5		0.477	0.105	mg/Kg	1		✱	6010	Total/NA
Cadmium	4.53		0.191	0.0286	mg/Kg	1		✱	6010	Total/NA
Chromium	305		0.477	0.191	mg/Kg	1		✱	6010	Total/NA
Silver	0.825		0.477	0.191	mg/Kg	1		✱	6010	Total/NA
Lead	418	^	0.477	0.229	mg/Kg	1		✱	6010	Total/NA
Selenium	1.93		0.477	0.382	mg/Kg	1		✱	6010	Total/NA
Antimony	4.66	^	0.477	0.382	mg/Kg	1		✱	6010	Total/NA
Beryllium	0.461		0.191	0.0267	mg/Kg	1		✱	6010	Total/NA
Nickel	100		0.954	0.220	mg/Kg	1		✱	6010	Total/NA
Vanadium	29.5		0.477	0.105	mg/Kg	1		✱	6010	Total/NA
Zinc	596	B	2.39	0.146	mg/Kg	1		✱	6010	Total/NA
Mercury	1.30		0.485	0.0393	mg/Kg	5		✱	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	33.1		5.26	5.26	mg/Kg	1		✱	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-22-(0-0.25)

Lab Sample ID: 480-45969-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	6.29		0.977	0.391	mg/Kg	1		☼	6010	Total/NA
Barium	124		0.488	0.107	mg/Kg	1		☼	6010	Total/NA
Cadmium	3.15		0.195	0.0293	mg/Kg	1		☼	6010	Total/NA
Chromium	66.7		0.488	0.195	mg/Kg	1		☼	6010	Total/NA
Silver	0.783		0.488	0.195	mg/Kg	1		☼	6010	Total/NA
Lead	668	^	0.488	0.234	mg/Kg	1		☼	6010	Total/NA
Selenium	1.38		0.488	0.391	mg/Kg	1		☼	6010	Total/NA
Antimony	2.90	^	0.488	0.391	mg/Kg	1		☼	6010	Total/NA
Beryllium	1.96		0.195	0.0274	mg/Kg	1		☼	6010	Total/NA
Nickel	129		0.977	0.225	mg/Kg	1		☼	6010	Total/NA
Vanadium	22.4		0.488	0.107	mg/Kg	1		☼	6010	Total/NA
Zinc	1330	B	2.44	0.149	mg/Kg	1		☼	6010	Total/NA
Mercury	2.46		0.968	0.0784	mg/Kg	10		☼	7471A	Total/NA

Client Sample ID: WCSS-23-(0-0.25)

Lab Sample ID: 480-45969-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Bromomethane	0.0474	J	0.195	0.0176	mg/Kg	1		☼	8260C	Total/NA
Chloromethane	0.0532	J	0.195	0.0118	mg/Kg	1		☼	8260C	Total/NA
cis-1,2-Dichloroethene	0.0363	J	0.0977	0.0250	mg/Kg	1		☼	8260C	Total/NA
Dichlorodifluoromethane	0.120	J	0.195	0.0161	mg/Kg	1		☼	8260C	Total/NA
Naphthalene	0.0337	J	0.977	0.0262	mg/Kg	1		☼	8260C	Total/NA
Tetrachloroethene	1.59		0.0977	0.0262	mg/Kg	1		☼	8260C	Total/NA
Trichloroethene	0.110		0.0977	0.0430	mg/Kg	1		☼	8260C	Total/NA
Trichlorofluoromethane	0.0379	J	0.195	0.0185	mg/Kg	1		☼	8260C	Total/NA
Vinyl chloride	0.0509	J	0.0977	0.0238	mg/Kg	1		☼	8260C	Total/NA
C5-C8 Aliphatics (adjusted)	0.411	J	2.64	0.106	mg/Kg	10		☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.411	J	2.03	0.0811	mg/Kg	10		☼	MAVPH	Total/NA
C9-C10 Aromatics	2.34		2.03	0.0811	mg/Kg	10		☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	2.21		2.03	0.0811	mg/Kg	10		☼	MAVPH	Total/NA
Acenaphthene	0.176	J	0.517	0.0838	mg/Kg	1		☼	MA-EPH	Total/NA
Acenaphthylene	0.354	J	0.517	0.0931	mg/Kg	1		☼	MA-EPH	Total/NA
Anthracene	0.397	J	0.517	0.0982	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[a]anthracene	2.00		0.517	0.0786	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[a]pyrene	3.00		0.517	0.0745	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	3.18		0.517	0.0734	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[g,h,i]perylene	2.45	B	0.517	0.0879	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[k]fluoranthene	1.43		0.517	0.0755	mg/Kg	1		☼	MA-EPH	Total/NA
2-Methylnaphthalene	0.133	J	0.517	0.101	mg/Kg	1		☼	MA-EPH	Total/NA
Chrysene	2.53		0.517	0.0920	mg/Kg	1		☼	MA-EPH	Total/NA
Dibenz(a,h)anthracene	1.24	B	0.517	0.0724	mg/Kg	1		☼	MA-EPH	Total/NA
Fluoranthene	2.78		0.517	0.0910	mg/Kg	1		☼	MA-EPH	Total/NA
Fluorene	0.302	J	0.517	0.103	mg/Kg	1		☼	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	2.45	B	0.517	0.0755	mg/Kg	1		☼	MA-EPH	Total/NA
Naphthalene	0.116	J	0.517	0.0869	mg/Kg	1		☼	MA-EPH	Total/NA
Phenanthrene	1.29	B	0.517	0.103	mg/Kg	1		☼	MA-EPH	Total/NA
Pyrene	3.16		0.517	0.0941	mg/Kg	1		☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	128	B	5.17	2.07	mg/Kg	1		☼	MA-EPH	Total/NA
C19-C36 Aliphatics	221		5.17	2.07	mg/Kg	1		☼	MA-EPH	Total/NA
C9-C18 Aliphatics	59.0		5.17	2.07	mg/Kg	1		☼	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-23-(0-0.25) (Continued)

Lab Sample ID: 480-45969-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	34.4		1.07	0.429	mg/Kg	1		☼	6010	Total/NA
Barium	4750		5.36	1.18	mg/Kg	10		☼	6010	Total/NA
Cadmium	14.6		0.214	0.0322	mg/Kg	1		☼	6010	Total/NA
Chromium	119		0.536	0.214	mg/Kg	1		☼	6010	Total/NA
Silver	2.13		0.536	0.214	mg/Kg	1		☼	6010	Total/NA
Lead	13100		5.36	2.57	mg/Kg	10		☼	6010	Total/NA
Selenium	4.77		0.536	0.429	mg/Kg	1		☼	6010	Total/NA
Antimony	112	^	0.536	0.429	mg/Kg	1		☼	6010	Total/NA
Beryllium	1.21		0.214	0.0300	mg/Kg	1		☼	6010	Total/NA
Nickel	109		1.07	0.247	mg/Kg	1		☼	6010	Total/NA
Vanadium	46.6		0.536	0.118	mg/Kg	1		☼	6010	Total/NA
Zinc	10000	B	26.8	1.64	mg/Kg	10		☼	6010	Total/NA
Mercury	6.55		2.18	0.176	mg/Kg	20		☼	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	101		5.28	5.28	mg/Kg	1		☼	MA-EPH	Total/NA

Client Sample ID: WCSS-25-(0-0.25)

Lab Sample ID: 480-45969-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
C5-C8 Aliphatics (adjusted)	0.127	J	1.52	0.0608	mg/Kg	5		☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.127	J	1.37	0.0549	mg/Kg	5		☼	MAVPH	Total/NA
C9-C10 Aromatics	0.867	J	1.37	0.0549	mg/Kg	5		☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.802	J	1.37	0.0549	mg/Kg	5		☼	MAVPH	Total/NA
Acenaphthene	0.211	J	0.597	0.0967	mg/Kg	1		☼	MA-EPH	Total/NA
Anthracene	0.670		0.597	0.113	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[a]anthracene	4.08		0.597	0.0907	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[a]pyrene	5.20		0.597	0.0859	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	7.26		0.597	0.0847	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[g,h,i]perylene	3.77	B	0.597	0.101	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[k]fluoranthene	2.94		0.597	0.0871	mg/Kg	1		☼	MA-EPH	Total/NA
2-Methylnaphthalene	0.168	J	0.597	0.117	mg/Kg	1		☼	MA-EPH	Total/NA
Chrysene	6.32		0.597	0.106	mg/Kg	1		☼	MA-EPH	Total/NA
Dibenz(a,h)anthracene	2.06	B	0.597	0.0835	mg/Kg	1		☼	MA-EPH	Total/NA
Fluoranthene	10.6		0.597	0.105	mg/Kg	1		☼	MA-EPH	Total/NA
Fluorene	0.375	J	0.597	0.119	mg/Kg	1		☼	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	3.92	B	0.597	0.0871	mg/Kg	1		☼	MA-EPH	Total/NA
Naphthalene	0.162	J	0.597	0.100	mg/Kg	1		☼	MA-EPH	Total/NA
Phenanthrene	4.44	B	0.597	0.119	mg/Kg	1		☼	MA-EPH	Total/NA
Pyrene	8.42		0.597	0.109	mg/Kg	1		☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	235	B	5.97	2.39	mg/Kg	1		☼	MA-EPH	Total/NA
C19-C36 Aliphatics	226		5.97	2.39	mg/Kg	1		☼	MA-EPH	Total/NA
C9-C18 Aliphatics	6.58		5.97	2.39	mg/Kg	1		☼	MA-EPH	Total/NA
Arsenic	8.97		1.18	0.474	mg/Kg	1		☼	6010	Total/NA
Barium	238		0.592	0.130	mg/Kg	1		☼	6010	Total/NA
Cadmium	10.9		0.237	0.0355	mg/Kg	1		☼	6010	Total/NA
Chromium	71.3		0.592	0.237	mg/Kg	1		☼	6010	Total/NA
Silver	1.11		0.592	0.237	mg/Kg	1		☼	6010	Total/NA
Lead	1230	^	0.592	0.284	mg/Kg	1		☼	6010	Total/NA
Selenium	2.15		0.592	0.474	mg/Kg	1		☼	6010	Total/NA
Antimony	3.02	^	0.592	0.474	mg/Kg	1		☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-25-(0-0.25) (Continued)

Lab Sample ID: 480-45969-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Beryllium	0.593		0.237	0.0331	mg/Kg	1		☼	6010	Total/NA
Nickel	101		1.18	0.272	mg/Kg	1		☼	6010	Total/NA
Vanadium	57.6		0.592	0.130	mg/Kg	1		☼	6010	Total/NA
Zinc	2240	B	2.96	0.181	mg/Kg	1		☼	6010	Total/NA
Mercury	3.10		1.17	0.0944	mg/Kg	10		☼	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	174		6.08	6.08	mg/Kg	1		☼	MA-EPH	Total/NA

Client Sample ID: WCSS-24-(0-0.25)

Lab Sample ID: 480-45969-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	6.81		1.02	0.409	mg/Kg	1		☼	6010	Total/NA
Barium	161		0.511	0.113	mg/Kg	1		☼	6010	Total/NA
Cadmium	4.16		0.205	0.0307	mg/Kg	1		☼	6010	Total/NA
Chromium	107		0.511	0.205	mg/Kg	1		☼	6010	Total/NA
Silver	0.855		0.511	0.205	mg/Kg	1		☼	6010	Total/NA
Lead	1960	^	0.511	0.245	mg/Kg	1		☼	6010	Total/NA
Selenium	2.16		0.511	0.409	mg/Kg	1		☼	6010	Total/NA
Antimony	0.481	J ^	0.511	0.409	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.416		0.205	0.0286	mg/Kg	1		☼	6010	Total/NA
Thallium	0.505	J	1.02	0.307	mg/Kg	1		☼	6010	Total/NA
Nickel	134		1.02	0.235	mg/Kg	1		☼	6010	Total/NA
Vanadium	96.6		0.511	0.113	mg/Kg	1		☼	6010	Total/NA
Zinc	1350	B	2.56	0.157	mg/Kg	1		☼	6010	Total/NA
Mercury	4.85		2.27	0.184	mg/Kg	20		☼	7471A	Total/NA

Client Sample ID: WCSS-26-(0-0.25)

Lab Sample ID: 480-45969-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.548		0.139	0.0355	mg/Kg	2		☼	8260C	Total/NA
Tetrachloroethene	3.94		0.139	0.0372	mg/Kg	2		☼	8260C	Total/NA
Trichloroethene	0.402		0.139	0.0611	mg/Kg	2		☼	8260C	Total/NA
C5-C8 Aliphatics (adjusted)	0.697	J	1.32	0.0530	mg/Kg	5		☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.697	J	0.762	0.0305	mg/Kg	5		☼	MAVPH	Total/NA
C9-C10 Aromatics	0.608	J	0.762	0.0305	mg/Kg	5		☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.609	J	0.762	0.0305	mg/Kg	5		☼	MAVPH	Total/NA
Anthracene	0.101	J	0.521	0.0989	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[a]anthracene	0.424	J	0.521	0.0791	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[a]pyrene	0.954		0.521	0.0750	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	1.11		0.521	0.0739	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[g,h,i]perylene	1.13	B	0.521	0.0885	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[k]fluoranthene	0.529		0.521	0.0760	mg/Kg	1		☼	MA-EPH	Total/NA
Chrysene	0.627		0.521	0.0927	mg/Kg	1		☼	MA-EPH	Total/NA
Dibenz(a,h)anthracene	0.752	B	0.521	0.0729	mg/Kg	1		☼	MA-EPH	Total/NA
Fluoranthene	0.727		0.521	0.0916	mg/Kg	1		☼	MA-EPH	Total/NA
Fluorene	0.175	J	0.521	0.104	mg/Kg	1		☼	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	1.11	B	0.521	0.0760	mg/Kg	1		☼	MA-EPH	Total/NA
Phenanthrene	0.504	J B	0.521	0.104	mg/Kg	1		☼	MA-EPH	Total/NA
Pyrene	0.698		0.521	0.0947	mg/Kg	1		☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	37.4	B	5.21	2.08	mg/Kg	1		☼	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-26-(0-0.25) (Continued)

Lab Sample ID: 480-45969-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
C19-C36 Aliphatics	51.1		5.21	2.08	mg/Kg	1		☼	MA-EPH	Total/NA
C9-C18 Aliphatics	2.83	J	5.21	2.08	mg/Kg	1		☼	MA-EPH	Total/NA
Arsenic	1.80		1.06	0.425	mg/Kg	1		☼	6010	Total/NA
Barium	25.7		0.531	0.117	mg/Kg	1		☼	6010	Total/NA
Cadmium	0.282		0.212	0.0318	mg/Kg	1		☼	6010	Total/NA
Chromium	15.2		0.531	0.212	mg/Kg	1		☼	6010	Total/NA
Lead	77.8	^	0.531	0.255	mg/Kg	1		☼	6010	Total/NA
Selenium	0.848		0.531	0.425	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.197	J	0.212	0.0297	mg/Kg	1		☼	6010	Total/NA
Nickel	16.1		1.06	0.244	mg/Kg	1		☼	6010	Total/NA
Vanadium	14.6		0.531	0.117	mg/Kg	1		☼	6010	Total/NA
Zinc	92.0	B	2.65	0.162	mg/Kg	1		☼	6010	Total/NA
Mercury	0.131		0.108	0.00874	mg/Kg	1		☼	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	28.5		5.30	5.30	mg/Kg	1		☼	MA-EPH	Total/NA

Client Sample ID: WCSS-27-(0-0.25)

Lab Sample ID: 480-45969-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
1,4-Dichlorobenzene	1.07		0.0937	0.0262	mg/Kg	1		☼	8260C	Total/NA
Naphthalene	0.0298	J	0.937	0.0251	mg/Kg	1		☼	8260C	Total/NA
Tetrachloroethene	0.0923	J	0.0937	0.0252	mg/Kg	1		☼	8260C	Total/NA
C5-C8 Aliphatics (adjusted)	0.0484	J	0.285	0.0114	mg/Kg	1		☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.0520	J	0.174	0.00694	mg/Kg	1		☼	MAVPH	Total/NA
C9-C10 Aromatics	0.580		0.174	0.00694	mg/Kg	1		☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.270		0.174	0.00694	mg/Kg	1		☼	MAVPH	Total/NA
Benzo[a]pyrene	0.0936	J	0.565	0.0814	mg/Kg	1		☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	0.164	J	0.565	0.0802	mg/Kg	1		☼	MA-EPH	Total/NA
2-Methylnaphthalene	0.632		0.565	0.111	mg/Kg	1		☼	MA-EPH	Total/NA
Chrysene	0.119	J	0.565	0.101	mg/Kg	1		☼	MA-EPH	Total/NA
Fluoranthene	0.238	J	0.565	0.0994	mg/Kg	1		☼	MA-EPH	Total/NA
Fluorene	0.255	J	0.565	0.113	mg/Kg	1		☼	MA-EPH	Total/NA
Naphthalene	1.03		0.565	0.0949	mg/Kg	1		☼	MA-EPH	Total/NA
Phenanthrene	0.500	J B	0.565	0.113	mg/Kg	1		☼	MA-EPH	Total/NA
Pyrene	0.190	J	0.565	0.103	mg/Kg	1		☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	12.1	B	5.65	2.26	mg/Kg	1		☼	MA-EPH	Total/NA
C19-C36 Aliphatics	160		5.65	2.26	mg/Kg	1		☼	MA-EPH	Total/NA
C9-C18 Aliphatics	23.5		5.65	2.26	mg/Kg	1		☼	MA-EPH	Total/NA
Arsenic	6.33		0.998	0.399	mg/Kg	1		☼	6010	Total/NA
Barium	69.9		0.499	0.110	mg/Kg	1		☼	6010	Total/NA
Cadmium	1.94		0.200	0.0299	mg/Kg	1		☼	6010	Total/NA
Chromium	213		0.499	0.200	mg/Kg	1		☼	6010	Total/NA
Lead	1300		2.49	1.20	mg/Kg	5		☼	6010	Total/NA
Selenium	3.04		0.499	0.399	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.130	J	0.200	0.0279	mg/Kg	1		☼	6010	Total/NA
Thallium	0.418	J	0.998	0.299	mg/Kg	1		☼	6010	Total/NA
Nickel	288		4.99	1.15	mg/Kg	5		☼	6010	Total/NA
Vanadium	102		2.49	0.549	mg/Kg	5		☼	6010	Total/NA
Zinc	544	B	2.49	0.153	mg/Kg	1		☼	6010	Total/NA
Mercury	0.664		0.108	0.00878	mg/Kg	1		☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-27-(0-0.25) (Continued)

Lab Sample ID: 480-45969-16

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	8.84		5.71	5.71	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSS-28-(0-0.25)

Lab Sample ID: 480-45969-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.00194	J	0.00239	0.000643	mg/Kg	1	☼	8260C	Total/NA
C9-C10 Aromatics	1.21	J	1.34	0.0535	mg/Kg	10	☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.854	J	1.34	0.0535	mg/Kg	10	☼	MAVPH	Total/NA
Acenaphthylene	0.157	J	0.512	0.0921	mg/Kg	1	☼	MA-EPH	Total/NA
Anthracene	0.357	J	0.512	0.0972	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]anthracene	1.29		0.512	0.0778	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]pyrene	1.66		0.512	0.0737	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	2.10		0.512	0.0726	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[g,h,i]perylene	1.41	B	0.512	0.0870	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[k]fluoranthene	1.14		0.512	0.0747	mg/Kg	1	☼	MA-EPH	Total/NA
Chrysene	1.55		0.512	0.0911	mg/Kg	1	☼	MA-EPH	Total/NA
Dibenz(a,h)anthracene	0.881	B	0.512	0.0716	mg/Kg	1	☼	MA-EPH	Total/NA
Fluoranthene	1.93		0.512	0.0900	mg/Kg	1	☼	MA-EPH	Total/NA
Fluorene	0.187	J	0.512	0.102	mg/Kg	1	☼	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	1.44	B	0.512	0.0747	mg/Kg	1	☼	MA-EPH	Total/NA
Phenanthrene	1.22	B	0.512	0.102	mg/Kg	1	☼	MA-EPH	Total/NA
Pyrene	1.94		0.512	0.0931	mg/Kg	1	☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	71.7	B	5.12	2.05	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	14.3		5.12	2.05	mg/Kg	1	☼	MA-EPH	Total/NA
Arsenic	2.45		0.976	0.390	mg/Kg	1	☼	6010	Total/NA
Barium	28.9		0.488	0.107	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.783		0.195	0.0293	mg/Kg	1	☼	6010	Total/NA
Chromium	30.6		0.488	0.195	mg/Kg	1	☼	6010	Total/NA
Lead	143	^	0.488	0.234	mg/Kg	1	☼	6010	Total/NA
Selenium	0.499		0.488	0.390	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.217		0.195	0.0273	mg/Kg	1	☼	6010	Total/NA
Nickel	34.8		0.976	0.224	mg/Kg	1	☼	6010	Total/NA
Vanadium	25.1		0.488	0.107	mg/Kg	1	☼	6010	Total/NA
Zinc	177	B	2.44	0.149	mg/Kg	1	☼	6010	Total/NA
Mercury	0.178		0.0987	0.00799	mg/Kg	1	☼	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	54.4		5.34	5.34	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSS-29-(0-0.25)

Lab Sample ID: 480-45969-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.47		1.16	0.463	mg/Kg	1	☼	6010	Total/NA
Barium	178		0.579	0.127	mg/Kg	1	☼	6010	Total/NA
Cadmium	5.32		0.232	0.0347	mg/Kg	1	☼	6010	Total/NA
Chromium	105		0.579	0.232	mg/Kg	1	☼	6010	Total/NA
Silver	0.891		0.579	0.232	mg/Kg	1	☼	6010	Total/NA
Lead	1280	^	0.579	0.278	mg/Kg	1	☼	6010	Total/NA
Selenium	2.27		0.579	0.463	mg/Kg	1	☼	6010	Total/NA
Antimony	5.48	^	0.579	0.463	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.316		0.232	0.0324	mg/Kg	1	☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-29-(0-0.25) (Continued)

Lab Sample ID: 480-45969-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	130		1.16	0.266	mg/Kg	1	☼	6010	Total/NA
Vanadium	41.2		0.579	0.127	mg/Kg	1	☼	6010	Total/NA
Zinc	2080	B	2.89	0.177	mg/Kg	1	☼	6010	Total/NA
Mercury	5.57		2.10	0.170	mg/Kg	20	☼	7471A	Total/NA

Client Sample ID: WCSS-30-(0-0.25)

Lab Sample ID: 480-45969-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.47		1.01	0.403	mg/Kg	1	☼	6010	Total/NA
Barium	37.1		0.504	0.111	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.346		0.202	0.0302	mg/Kg	1	☼	6010	Total/NA
Chromium	19.1		0.504	0.202	mg/Kg	1	☼	6010	Total/NA
Lead	78.2	^	0.504	0.242	mg/Kg	1	☼	6010	Total/NA
Selenium	0.869	B	0.504	0.403	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.366		0.202	0.0282	mg/Kg	1	☼	6010	Total/NA
Nickel	18.2		1.01	0.232	mg/Kg	1	☼	6010	Total/NA
Vanadium	20.3		0.504	0.111	mg/Kg	1	☼	6010	Total/NA
Zinc	91.7	B	2.52	0.154	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0771	J	0.112	0.00906	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: WCSS-31-(0-0.25)

Lab Sample ID: 480-45969-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.36		1.02	0.410	mg/Kg	1	☼	6010	Total/NA
Barium	26.2		0.512	0.113	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.206		0.205	0.0307	mg/Kg	1	☼	6010	Total/NA
Chromium	10.9		0.512	0.205	mg/Kg	1	☼	6010	Total/NA
Lead	52.1	^	0.512	0.246	mg/Kg	1	☼	6010	Total/NA
Selenium	0.667	B	0.512	0.410	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.238		0.205	0.0287	mg/Kg	1	☼	6010	Total/NA
Nickel	11.8		1.02	0.236	mg/Kg	1	☼	6010	Total/NA
Vanadium	21.4		0.512	0.113	mg/Kg	1	☼	6010	Total/NA
Zinc	62.5	B	2.56	0.157	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0756	J	0.102	0.00823	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: WCSS-32-(0-0.25)

Lab Sample ID: 480-45969-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	5.24		0.968	0.387	mg/Kg	1	☼	6010	Total/NA
Barium	45.6		0.484	0.107	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.981		0.194	0.0291	mg/Kg	1	☼	6010	Total/NA
Chromium	49.6		0.484	0.194	mg/Kg	1	☼	6010	Total/NA
Lead	202	^	0.484	0.232	mg/Kg	1	☼	6010	Total/NA
Selenium	1.24	B	0.484	0.387	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.348		0.194	0.0271	mg/Kg	1	☼	6010	Total/NA
Nickel	54.7		0.968	0.223	mg/Kg	1	☼	6010	Total/NA
Vanadium	37.7		0.484	0.107	mg/Kg	1	☼	6010	Total/NA
Zinc	222	B	2.42	0.148	mg/Kg	1	☼	6010	Total/NA
Mercury	0.177		0.109	0.00879	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-33-(0-0.25)

Lab Sample ID: 480-45969-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C5-C8 Aliphatics (adjusted)	0.0530	J	0.293	0.0117	mg/Kg	1	☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.0718	J	0.196	0.00783	mg/Kg	1	☼	MAVPH	Total/NA
C9-C10 Aromatics	0.429		0.196	0.00783	mg/Kg	1	☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.339		0.196	0.00783	mg/Kg	1	☼	MAVPH	Total/NA
Anthracene	0.203	J	0.550	0.105	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]anthracene	1.27		0.550	0.0837	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]pyrene	1.63		0.550	0.0793	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	2.08		0.550	0.0782	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[g,h,i]perylene	2.24	B	0.550	0.0936	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[k]fluoranthene	1.07		0.550	0.0804	mg/Kg	1	☼	MA-EPH	Total/NA
2-Methylnaphthalene	0.125	J	0.550	0.108	mg/Kg	1	☼	MA-EPH	Total/NA
Chrysene	1.50		0.550	0.0980	mg/Kg	1	☼	MA-EPH	Total/NA
Dibenz(a,h)anthracene	1.27	B	0.550	0.0771	mg/Kg	1	☼	MA-EPH	Total/NA
Fluoranthene	1.46		0.550	0.0969	mg/Kg	1	☼	MA-EPH	Total/NA
Fluorene	0.322	J	0.550	0.110	mg/Kg	1	☼	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	1.81	B	0.550	0.0804	mg/Kg	1	☼	MA-EPH	Total/NA
Phenanthrene	0.892	B	0.550	0.110	mg/Kg	1	☼	MA-EPH	Total/NA
Pyrene	1.51		0.550	0.100	mg/Kg	1	☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	92.2	B	5.50	2.20	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	165		5.50	2.20	mg/Kg	1	☼	MA-EPH	Total/NA
C9-C18 Aliphatics	4.60	J	5.50	2.20	mg/Kg	1	☼	MA-EPH	Total/NA
Arsenic	19.8		1.15	0.459	mg/Kg	1	☼	6010	Total/NA
Barium	208		0.573	0.126	mg/Kg	1	☼	6010	Total/NA
Cadmium	7.21		0.229	0.0344	mg/Kg	1	☼	6010	Total/NA
Chromium	109		0.573	0.229	mg/Kg	1	☼	6010	Total/NA
Silver	1.77		0.573	0.229	mg/Kg	1	☼	6010	Total/NA
Lead	1470	^	0.573	0.275	mg/Kg	1	☼	6010	Total/NA
Selenium	2.89	B	0.573	0.459	mg/Kg	1	☼	6010	Total/NA
Antimony	5.34	^	0.573	0.459	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.605		0.229	0.0321	mg/Kg	1	☼	6010	Total/NA
Nickel	178		1.15	0.264	mg/Kg	1	☼	6010	Total/NA
Vanadium	67.0		0.573	0.126	mg/Kg	1	☼	6010	Total/NA
Zinc	1740	B	2.87	0.175	mg/Kg	1	☼	6010	Total/NA
Mercury	2.65		2.16	0.175	mg/Kg	20	☼	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	74.8		5.87	5.87	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSS-34-(0-0.25)

Lab Sample ID: 480-45969-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C5-C8 Aliphatics (adjusted)	0.0979	J	1.47	0.0588	mg/Kg	5	☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.141	J	1.01	0.0405	mg/Kg	5	☼	MAVPH	Total/NA
C9-C10 Aromatics	0.609	J	1.01	0.0405	mg/Kg	5	☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.480	J	1.01	0.0405	mg/Kg	5	☼	MAVPH	Total/NA
Anthracene	0.241	J	0.574	0.109	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]anthracene	1.62		0.574	0.0873	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]pyrene	2.31		0.574	0.0827	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	3.74		0.574	0.0815	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[g,h,i]perylene	2.04	B	0.574	0.0976	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[k]fluoranthene	1.44		0.574	0.0838	mg/Kg	1	☼	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-34-(0-0.25) (Continued)

Lab Sample ID: 480-45969-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.157	J	0.574	0.113	mg/Kg	1	☼	MA-EPH	Total/NA
Chrysene	2.10		0.574	0.102	mg/Kg	1	☼	MA-EPH	Total/NA
Dibenz(a,h)anthracene	1.31	B	0.574	0.0804	mg/Kg	1	☼	MA-EPH	Total/NA
Fluoranthene	1.93		0.574	0.101	mg/Kg	1	☼	MA-EPH	Total/NA
Fluorene	0.165	J	0.574	0.115	mg/Kg	1	☼	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	2.17	B	0.574	0.0838	mg/Kg	1	☼	MA-EPH	Total/NA
Naphthalene	0.105	J	0.574	0.0965	mg/Kg	1	☼	MA-EPH	Total/NA
Phenanthrene	0.926	B	0.574	0.115	mg/Kg	1	☼	MA-EPH	Total/NA
Pyrene	1.90		0.574	0.105	mg/Kg	1	☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	109	B	5.74	2.30	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	288		5.74	2.30	mg/Kg	1	☼	MA-EPH	Total/NA
C9-C18 Aliphatics	3.63	J	5.74	2.30	mg/Kg	1	☼	MA-EPH	Total/NA
Arsenic	10.4		1.13	0.452	mg/Kg	1	☼	6010	Total/NA
Barium	114		0.565	0.124	mg/Kg	1	☼	6010	Total/NA
Cadmium	4.36		0.226	0.0339	mg/Kg	1	☼	6010	Total/NA
Chromium	111		0.565	0.226	mg/Kg	1	☼	6010	Total/NA
Silver	1.47		0.565	0.226	mg/Kg	1	☼	6010	Total/NA
Lead	1040	^	0.565	0.271	mg/Kg	1	☼	6010	Total/NA
Selenium	1.67	B	0.565	0.452	mg/Kg	1	☼	6010	Total/NA
Antimony	2.83	^	0.565	0.452	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.524		0.226	0.0316	mg/Kg	1	☼	6010	Total/NA
Nickel	113		1.13	0.260	mg/Kg	1	☼	6010	Total/NA
Vanadium	45.8		0.565	0.124	mg/Kg	1	☼	6010	Total/NA
Zinc	1120	B	2.82	0.173	mg/Kg	1	☼	6010	Total/NA
Mercury	2.09	J	2.17	0.175	mg/Kg	20	☼	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	87.3		5.88	5.88	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSS-35-(0-0.25)

Lab Sample ID: 480-45969-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dichlorobenzene	0.0664	J	0.113	0.0317	mg/Kg	1	☼	8260C	Total/NA
2-Butanone (MEK)	0.197	J *	1.13	0.0830	mg/Kg	1	☼	8260C	Total/NA
4-Isopropyltoluene	0.236		0.113	0.0182	mg/Kg	1	☼	8260C	Total/NA
Acetone	0.745	J	11.3	0.191	mg/Kg	1	☼	8260C	Total/NA
Benzene	0.0453	J	0.113	0.0111	mg/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.0986	J	0.113	0.0156	mg/Kg	1	☼	8260C	Total/NA
Isopropylbenzene	0.0596	J	0.113	0.0342	mg/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene	0.0989	J	0.227	0.0381	mg/Kg	1	☼	8260C	Total/NA
N-Propylbenzene	0.0342	J	0.113	0.0181	mg/Kg	1	☼	8260C	Total/NA
Styrene	1.87		0.113	0.0113	mg/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	0.0594	J	0.113	0.0304	mg/Kg	1	☼	8260C	Total/NA
Toluene	0.0785	J	0.113	0.0171	mg/Kg	1	☼	8260C	Total/NA
Trichlorofluoromethane	0.0900	J	0.227	0.0214	mg/Kg	1	☼	8260C	Total/NA
C5-C8 Aliphatics (adjusted)	0.0636	J	0.270	0.0108	mg/Kg	1	☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.177	J	0.247	0.00988	mg/Kg	1	☼	MAVPH	Total/NA
C9-C10 Aromatics	0.334		0.247	0.00988	mg/Kg	1	☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.722		0.247	0.00988	mg/Kg	1	☼	MAVPH	Total/NA
Anthracene	0.686		0.519	0.0987	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]anthracene	2.88		0.519	0.0789	mg/Kg	1	☼	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-35-(0-0.25) (Continued)

Lab Sample ID: 480-45969-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]pyrene	2.55		0.519	0.0748	mg/Kg	1		✱	MA-EPH	Total/NA
Benzo[b]fluoranthene	4.02		0.519	0.0738	mg/Kg	1		✱	MA-EPH	Total/NA
Benzo[g,h,i]perylene	1.64	B	0.519	0.0883	mg/Kg	1		✱	MA-EPH	Total/NA
Benzo[k]fluoranthene	1.93		0.519	0.0758	mg/Kg	1		✱	MA-EPH	Total/NA
2-Methylnaphthalene	0.126	J	0.519	0.102	mg/Kg	1		✱	MA-EPH	Total/NA
Chrysene	4.23		0.519	0.0925	mg/Kg	1		✱	MA-EPH	Total/NA
Dibenz(a,h)anthracene	1.01	B	0.519	0.0727	mg/Kg	1		✱	MA-EPH	Total/NA
Fluoranthene	2.69		0.519	0.0914	mg/Kg	1		✱	MA-EPH	Total/NA
Fluorene	0.135	J	0.519	0.104	mg/Kg	1		✱	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	1.75	B	0.519	0.0758	mg/Kg	1		✱	MA-EPH	Total/NA
Phenanthrene	0.979	B	0.519	0.104	mg/Kg	1		✱	MA-EPH	Total/NA
Pyrene	4.12		0.519	0.0945	mg/Kg	1		✱	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	108	B	5.19	2.08	mg/Kg	1		✱	MA-EPH	Total/NA
C19-C36 Aliphatics	64.6		5.19	2.08	mg/Kg	1		✱	MA-EPH	Total/NA
C9-C18 Aliphatics	2.55	J	5.19	2.08	mg/Kg	1		✱	MA-EPH	Total/NA
Arsenic	3.04		1.14	0.456	mg/Kg	1		✱	6010	Total/NA
Barium	58.5		0.570	0.125	mg/Kg	1		✱	6010	Total/NA
Cadmium	1.33		0.228	0.0342	mg/Kg	1		✱	6010	Total/NA
Chromium	25.7		0.570	0.228	mg/Kg	1		✱	6010	Total/NA
Silver	0.469	J	0.570	0.228	mg/Kg	1		✱	6010	Total/NA
Lead	247	^	0.570	0.274	mg/Kg	1		✱	6010	Total/NA
Selenium	0.487	J B	0.570	0.456	mg/Kg	1		✱	6010	Total/NA
Antimony	2.17	^	0.570	0.456	mg/Kg	1		✱	6010	Total/NA
Beryllium	0.231		0.228	0.0319	mg/Kg	1		✱	6010	Total/NA
Nickel	32.2		1.14	0.262	mg/Kg	1		✱	6010	Total/NA
Vanadium	15.5		0.570	0.125	mg/Kg	1		✱	6010	Total/NA
Zinc	333	B	2.85	0.174	mg/Kg	1		✱	6010	Total/NA
Mercury	0.408		0.0998	0.00808	mg/Kg	1		✱	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	78.9		5.40	5.40	mg/Kg	1		✱	MA-EPH	Total/NA

Client Sample ID: WCSS-36-(0-0.25)

Lab Sample ID: 480-45969-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	13.8		1.06	0.423	mg/Kg	1		✱	6010	Total/NA
Barium	246		0.529	0.116	mg/Kg	1		✱	6010	Total/NA
Cadmium	16.1		0.212	0.0318	mg/Kg	1		✱	6010	Total/NA
Chromium	229		0.529	0.212	mg/Kg	1		✱	6010	Total/NA
Silver	2.78		2.65	1.06	mg/Kg	5		✱	6010	Total/NA
Lead	1690		2.65	1.27	mg/Kg	5		✱	6010	Total/NA
Selenium	4.14	B	0.529	0.423	mg/Kg	1		✱	6010	Total/NA
Antimony	4.35	^	0.529	0.423	mg/Kg	1		✱	6010	Total/NA
Beryllium	0.347		0.212	0.0296	mg/Kg	1		✱	6010	Total/NA
Thallium	0.564	J	1.06	0.318	mg/Kg	1		✱	6010	Total/NA
Nickel	328		5.29	1.22	mg/Kg	5		✱	6010	Total/NA
Vanadium	179		2.65	0.582	mg/Kg	5		✱	6010	Total/NA
Zinc	1570	B	2.65	0.162	mg/Kg	1		✱	6010	Total/NA
Mercury	1.59	J	2.08	0.168	mg/Kg	20		✱	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-38-(0-0.25)

Lab Sample ID: 480-45969-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.52		0.892	0.357	mg/Kg	1	☼	6010	Total/NA
Barium	21.2		0.446	0.0981	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.0785	J	0.178	0.0268	mg/Kg	1	☼	6010	Total/NA
Chromium	7.33		0.446	0.178	mg/Kg	1	☼	6010	Total/NA
Lead	33.9	^	0.446	0.214	mg/Kg	1	☼	6010	Total/NA
Selenium	0.580	B	0.446	0.357	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.307		0.178	0.0250	mg/Kg	1	☼	6010	Total/NA
Nickel	17.3		0.892	0.205	mg/Kg	1	☼	6010	Total/NA
Vanadium	31.7		0.446	0.0981	mg/Kg	1	☼	6010	Total/NA
Zinc	70.1	B	2.23	0.137	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0300	J	0.0939	0.00761	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: WCSS-39-(0-0.25)

Lab Sample ID: 480-45969-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.10		1.15	0.461	mg/Kg	1	☼	6010	Total/NA
Barium	43.6		0.576	0.127	mg/Kg	1	☼	6010	Total/NA
Cadmium	0.149	J	0.230	0.0346	mg/Kg	1	☼	6010	Total/NA
Chromium	12.9		0.576	0.230	mg/Kg	1	☼	6010	Total/NA
Lead	48.7	^	0.576	0.277	mg/Kg	1	☼	6010	Total/NA
Selenium	0.706	B	0.576	0.461	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.278		0.230	0.0323	mg/Kg	1	☼	6010	Total/NA
Nickel	16.0		1.15	0.265	mg/Kg	1	☼	6010	Total/NA
Vanadium	35.1		0.576	0.127	mg/Kg	1	☼	6010	Total/NA
Zinc	73.8	B	2.88	0.176	mg/Kg	1	☼	6010	Total/NA
Mercury	0.0688	J	0.0973	0.00788	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: WCSS-40-(0-0.25)

Lab Sample ID: 480-45969-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C5-C8 Aliphatics (adjusted)	0.0434	J	0.259	0.0104	mg/Kg	1	☼	MA VPH	Total/NA
C9-C12 Aliphatics (adjusted)	0.0707	J	0.259	0.0104	mg/Kg	1	☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.184		0.166	0.00662	mg/Kg	1	☼	MAVPH	Total/NA
C9-C10 Aromatics	0.338		0.166	0.00662	mg/Kg	1	☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.526		0.166	0.00662	mg/Kg	1	☼	MAVPH	Total/NA
Anthracene	0.205	J	0.488	0.0927	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]anthracene	1.41		0.488	0.0742	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]pyrene	1.74		0.488	0.0703	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	2.11		0.488	0.0693	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[g,h,i]perylene	1.34	B	0.488	0.0830	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[k]fluoranthene	1.08		0.488	0.0712	mg/Kg	1	☼	MA-EPH	Total/NA
Chrysene	1.60		0.488	0.0869	mg/Kg	1	☼	MA-EPH	Total/NA
Dibenz(a,h)anthracene	0.793	B	0.488	0.0683	mg/Kg	1	☼	MA-EPH	Total/NA
Fluoranthene	1.55		0.488	0.0859	mg/Kg	1	☼	MA-EPH	Total/NA
Fluorene	0.196	J	0.488	0.0976	mg/Kg	1	☼	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	1.34	B	0.488	0.0712	mg/Kg	1	☼	MA-EPH	Total/NA
Phenanthrene	0.655	B	0.488	0.0976	mg/Kg	1	☼	MA-EPH	Total/NA
Pyrene	1.78		0.488	0.0888	mg/Kg	1	☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	82.1	B	4.88	1.95	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	148		4.88	1.95	mg/Kg	1	☼	MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-40-(0-0.25) (Continued)

Lab Sample ID: 480-45969-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
C9-C18 Aliphatics	13.5		4.88	1.95	mg/Kg	1		☼	MA-EPH	Total/NA
Arsenic	4.33		1.04	0.415	mg/Kg	1		☼	6010	Total/NA
Barium	83.1		0.519	0.114	mg/Kg	1		☼	6010	Total/NA
Cadmium	2.30		0.208	0.0312	mg/Kg	1		☼	6010	Total/NA
Chromium	38.5		0.519	0.208	mg/Kg	1		☼	6010	Total/NA
Silver	1.49		0.519	0.208	mg/Kg	1		☼	6010	Total/NA
Lead	616	^	0.519	0.249	mg/Kg	1		☼	6010	Total/NA
Selenium	1.08	B	0.519	0.415	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.344		0.208	0.0291	mg/Kg	1		☼	6010	Total/NA
Nickel	51.8		1.04	0.239	mg/Kg	1		☼	6010	Total/NA
Vanadium	25.4		0.519	0.114	mg/Kg	1		☼	6010	Total/NA
Zinc	562	B	2.60	0.159	mg/Kg	1		☼	6010	Total/NA
Mercury	0.893	^	0.499	0.0404	mg/Kg	5		☼	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil	Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	66.3		5.19	5.19	mg/Kg	1		☼	MA-EPH	Total/NA

Client Sample ID: WCSS-41-(0-0.25)

Lab Sample ID: 480-45969-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	11.1		1.14	0.457	mg/Kg	1		☼	6010	Total/NA
Barium	736		0.571	0.126	mg/Kg	1		☼	6010	Total/NA
Cadmium	13.5		0.229	0.0343	mg/Kg	1		☼	6010	Total/NA
Chromium	122		0.571	0.229	mg/Kg	1		☼	6010	Total/NA
Silver	5.75		0.571	0.229	mg/Kg	1		☼	6010	Total/NA
Lead	2520	^	0.571	0.274	mg/Kg	1		☼	6010	Total/NA
Selenium	3.05	B	0.571	0.457	mg/Kg	1		☼	6010	Total/NA
Antimony	14.9	^	0.571	0.457	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.481		0.229	0.0320	mg/Kg	1		☼	6010	Total/NA
Nickel	166		1.14	0.263	mg/Kg	1		☼	6010	Total/NA
Vanadium	64.7		0.571	0.126	mg/Kg	1		☼	6010	Total/NA
Zinc	3290	B	5.71	0.350	mg/Kg	2		☼	6010	Total/NA
Mercury	4.79		2.12	0.172	mg/Kg	20		☼	7471A	Total/NA

Client Sample ID: WCSS-43-(0-0.25)

Lab Sample ID: 480-45969-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	7.74		1.08	0.431	mg/Kg	1		☼	6010	Total/NA
Barium	233		0.538	0.118	mg/Kg	1		☼	6010	Total/NA
Cadmium	7.88		0.215	0.0323	mg/Kg	1		☼	6010	Total/NA
Chromium	38.5		0.538	0.215	mg/Kg	1		☼	6010	Total/NA
Silver	0.709		0.538	0.215	mg/Kg	1		☼	6010	Total/NA
Lead	1440	^	0.538	0.258	mg/Kg	1		☼	6010	Total/NA
Selenium	1.54	B	0.538	0.431	mg/Kg	1		☼	6010	Total/NA
Antimony	16.6	^	0.538	0.431	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.350		0.215	0.0301	mg/Kg	1		☼	6010	Total/NA
Nickel	47.1		1.08	0.248	mg/Kg	1		☼	6010	Total/NA
Vanadium	22.0		0.538	0.118	mg/Kg	1		☼	6010	Total/NA
Zinc	989	B	2.69	0.165	mg/Kg	1		☼	6010	Total/NA
Mercury	9.00		2.05	0.166	mg/Kg	20		☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-44-(0-0.25)

Lab Sample ID: 480-45969-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.00511		0.00329	0.000883	mg/Kg	1	☼	8260C	Total/NA
C5-C8 Aliphatics (adjusted)	0.185	J	1.26	0.0503	mg/Kg	5	☼	MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	0.472	J	0.900	0.0360	mg/Kg	5	☼	MAVPH	Total/NA
C9-C10 Aromatics	0.588	J	0.900	0.0360	mg/Kg	5	☼	MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	0.607	J	0.900	0.0360	mg/Kg	5	☼	MAVPH	Total/NA
Acenaphthene	0.0785	J	0.471	0.0763	mg/Kg	1	☼	MA-EPH	Total/NA
Anthracene	0.321	J	0.471	0.0895	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]anthracene	1.37		0.471	0.0716	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[a]pyrene	3.41		0.471	0.0678	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[b]fluoranthene	2.90		0.471	0.0669	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[g,h,i]perylene	2.02	B	0.471	0.0801	mg/Kg	1	☼	MA-EPH	Total/NA
Benzo[k]fluoranthene	1.55		0.471	0.0688	mg/Kg	1	☼	MA-EPH	Total/NA
2-Methylnaphthalene	0.320	J	0.471	0.0923	mg/Kg	1	☼	MA-EPH	Total/NA
Chrysene	2.01		0.471	0.0838	mg/Kg	1	☼	MA-EPH	Total/NA
Dibenz(a,h)anthracene	1.26	B	0.471	0.0659	mg/Kg	1	☼	MA-EPH	Total/NA
Fluoranthene	2.05		0.471	0.0829	mg/Kg	1	☼	MA-EPH	Total/NA
Fluorene	0.284	J	0.471	0.0942	mg/Kg	1	☼	MA-EPH	Total/NA
Indeno[1,2,3-cd]pyrene	2.09	B	0.471	0.0688	mg/Kg	1	☼	MA-EPH	Total/NA
Naphthalene	0.309	J	0.471	0.0791	mg/Kg	1	☼	MA-EPH	Total/NA
Phenanthrene	0.896	B	0.471	0.0942	mg/Kg	1	☼	MA-EPH	Total/NA
Pyrene	1.95		0.471	0.0857	mg/Kg	1	☼	MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	144	B	4.71	1.88	mg/Kg	1	☼	MA-EPH	Total/NA
C19-C36 Aliphatics	441		4.71	1.88	mg/Kg	1	☼	MA-EPH	Total/NA
C9-C18 Aliphatics	36.5		4.71	1.88	mg/Kg	1	☼	MA-EPH	Total/NA
Arsenic	12.2		0.944	0.378	mg/Kg	1	☼	6010	Total/NA
Barium	376		0.472	0.104	mg/Kg	1	☼	6010	Total/NA
Cadmium	11.2		0.189	0.0283	mg/Kg	1	☼	6010	Total/NA
Chromium	257		0.472	0.189	mg/Kg	1	☼	6010	Total/NA
Silver	2.50		2.36	0.944	mg/Kg	5	☼	6010	Total/NA
Lead	2320		2.36	1.13	mg/Kg	5	☼	6010	Total/NA
Selenium	4.70	B	0.472	0.378	mg/Kg	1	☼	6010	Total/NA
Antimony	18.5	^	0.472	0.378	mg/Kg	1	☼	6010	Total/NA
Beryllium	0.316		0.189	0.0264	mg/Kg	1	☼	6010	Total/NA
Nickel	290		4.72	1.09	mg/Kg	5	☼	6010	Total/NA
Vanadium	51.2		2.36	0.519	mg/Kg	5	☼	6010	Total/NA
Zinc	3160	B	11.8	0.722	mg/Kg	5	☼	6010	Total/NA
Mercury	3.33		1.89	0.153	mg/Kg	20	☼	7471A	Total/NA
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	121		5.03	5.03	mg/Kg	1	☼	MA-EPH	Total/NA

Client Sample ID: WCSS-45-(0-0.25)

Lab Sample ID: 480-45969-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	10.3		1.20	0.481	mg/Kg	1	☼	6010	Total/NA
Barium	227		0.602	0.132	mg/Kg	1	☼	6010	Total/NA
Cadmium	14.0		0.241	0.0361	mg/Kg	1	☼	6010	Total/NA
Chromium	32.4		0.602	0.241	mg/Kg	1	☼	6010	Total/NA
Silver	0.547	J	0.602	0.241	mg/Kg	1	☼	6010	Total/NA
Lead	1030	^	0.602	0.289	mg/Kg	1	☼	6010	Total/NA
Selenium	2.74	B	0.602	0.481	mg/Kg	1	☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-45-(0-0.25) (Continued)

Lab Sample ID: 480-45969-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Antimony	6.32	^	0.602	0.481	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.451		0.241	0.0337	mg/Kg	1		☼	6010	Total/NA
Nickel	60.9		1.20	0.277	mg/Kg	1		☼	6010	Total/NA
Vanadium	23.8		0.602	0.132	mg/Kg	1		☼	6010	Total/NA
Zinc	1420	B	3.01	0.184	mg/Kg	1		☼	6010	Total/NA
Mercury	2.81		2.31	0.187	mg/Kg	20		☼	7471A	Total/NA

Client Sample ID: WCSS-46-(0-0.25)

Lab Sample ID: 480-45969-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	7.59		1.11	0.444	mg/Kg	1		☼	6010	Total/NA
Barium	134		0.555	0.122	mg/Kg	1		☼	6010	Total/NA
Cadmium	11.1		0.222	0.0333	mg/Kg	1		☼	6010	Total/NA
Chromium	13.9		0.555	0.222	mg/Kg	1		☼	6010	Total/NA
Silver	0.273	J	0.555	0.222	mg/Kg	1		☼	6010	Total/NA
Lead	412	^	0.555	0.267	mg/Kg	1		☼	6010	Total/NA
Selenium	1.25	B	0.555	0.444	mg/Kg	1		☼	6010	Total/NA
Antimony	0.824	^	0.555	0.444	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.286		0.222	0.0311	mg/Kg	1		☼	6010	Total/NA
Nickel	32.9		1.11	0.255	mg/Kg	1		☼	6010	Total/NA
Vanadium	17.8		0.555	0.122	mg/Kg	1		☼	6010	Total/NA
Zinc	2440	B	5.55	0.340	mg/Kg	2		☼	6010	Total/NA
Mercury	4.06		1.94	0.157	mg/Kg	20		☼	7471A	Total/NA

Client Sample ID: WCSS-47-(0-0.25)

Lab Sample ID: 480-45969-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	2.10		1.05	0.422	mg/Kg	1		☼	6010	Total/NA
Barium	13.6		0.527	0.116	mg/Kg	1		☼	6010	Total/NA
Cadmium	0.209	J	0.211	0.0316	mg/Kg	1		☼	6010	Total/NA
Chromium	8.76		0.527	0.211	mg/Kg	1		☼	6010	Total/NA
Lead	61.4	^	0.527	0.253	mg/Kg	1		☼	6010	Total/NA
Selenium	0.444	J B	0.527	0.422	mg/Kg	1		☼	6010	Total/NA
Antimony	2.66	^	0.527	0.422	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.146	J	0.211	0.0295	mg/Kg	1		☼	6010	Total/NA
Nickel	6.08		1.05	0.243	mg/Kg	1		☼	6010	Total/NA
Vanadium	11.5		0.527	0.116	mg/Kg	1		☼	6010	Total/NA
Zinc	47.7	B	2.64	0.161	mg/Kg	1		☼	6010	Total/NA
Mercury	0.106		0.0963	0.00780	mg/Kg	1		☼	7471A	Total/NA

Client Sample ID: WCSS-48-(0-0.25)

Lab Sample ID: 480-45969-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Arsenic	2.17		0.984	0.393	mg/Kg	1		☼	6010	Total/NA
Barium	23.7		0.492	0.108	mg/Kg	1		☼	6010	Total/NA
Cadmium	0.181	J	0.197	0.0295	mg/Kg	1		☼	6010	Total/NA
Chromium	10.2		0.492	0.197	mg/Kg	1		☼	6010	Total/NA
Lead	33.5	^	0.492	0.236	mg/Kg	1		☼	6010	Total/NA
Selenium	0.787	B	0.492	0.393	mg/Kg	1		☼	6010	Total/NA
Beryllium	0.422		0.197	0.0275	mg/Kg	1		☼	6010	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-48-(0-0.25) (Continued)

Lab Sample ID: 480-45969-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Nickel	32.6		0.984	0.226	mg/Kg	1		☼	6010	Total/NA
Vanadium	16.4		0.492	0.108	mg/Kg	1		☼	6010	Total/NA
Zinc	45.1	B	2.46	0.150	mg/Kg	1		☼	6010	Total/NA
Mercury	0.0470	J	0.101	0.00819	mg/Kg	1		☼	7471A	Total/NA

Client Sample ID: TB-09162013

Lab Sample ID: 480-45969-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	12.5	J	50.0	3.00	ug/L	1			8260C	Total/NA
Methylene Chloride	0.507	J	1.00	0.440	ug/L	1			8260C	Total/NA
Tetrahydrofuran	3.19	J	10.0	1.25	ug/L	1			8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-11-(0-0.25)

Lab Sample ID: 480-45969-1

Date Collected: 09/16/13 12:00

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 90.3

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	23.8		1.20	0.481	mg/Kg	☼	09/18/13 10:50	09/18/13 22:41	1
Barium	384		0.602	0.132	mg/Kg	☼	09/18/13 10:50	09/18/13 22:41	1
Cadmium	9.17		0.241	0.0361	mg/Kg	☼	09/18/13 10:50	09/18/13 22:41	1
Chromium	102		0.602	0.241	mg/Kg	☼	09/18/13 10:50	09/18/13 22:41	1
Silver	1.07		0.602	0.241	mg/Kg	☼	09/18/13 10:50	09/18/13 22:41	1
Lead	986	^	0.602	0.289	mg/Kg	☼	09/18/13 10:50	09/18/13 22:41	1
Selenium	3.28		0.602	0.481	mg/Kg	☼	09/18/13 10:50	09/18/13 22:41	1
Antimony	1.96	^	0.602	0.481	mg/Kg	☼	09/18/13 10:50	09/18/13 22:41	1
Beryllium	0.603		0.241	0.0337	mg/Kg	☼	09/18/13 10:50	09/18/13 22:41	1
Thallium	<1.20		1.20	0.361	mg/Kg	☼	09/18/13 10:50	09/18/13 22:41	1
Nickel	495		1.20	0.277	mg/Kg	☼	09/18/13 10:50	09/18/13 22:41	1
Vanadium	54.0		0.602	0.132	mg/Kg	☼	09/18/13 10:50	09/18/13 22:41	1
Zinc	2820	B	6.02	0.368	mg/Kg	☼	09/18/13 10:50	09/19/13 15:05	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.77		0.549	0.0444	mg/Kg	☼	09/18/13 08:00	09/18/13 13:57	5

Client Sample ID: WCSS-13-(0-0.25)

Lab Sample ID: 480-45969-2

Date Collected: 09/16/13 11:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.4

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.22		1.26	0.506	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1
Barium	73.3		0.632	0.139	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1
Cadmium	2.77		0.253	0.0379	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1
Chromium	72.8		0.632	0.253	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1
Silver	<0.632		0.632	0.253	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1
Lead	1320	^	0.632	0.304	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1
Selenium	1.36		0.632	0.506	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1
Antimony	<0.632	^	0.632	0.506	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1
Beryllium	0.196	J	0.253	0.0354	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1
Thallium	2.04		1.26	0.379	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1
Nickel	79.4		1.26	0.291	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1
Vanadium	291		0.632	0.139	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1
Zinc	742	B	3.16	0.194	mg/Kg	☼	09/18/13 10:50	09/18/13 22:43	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	61.0		11.6	0.943	mg/Kg	☼	09/18/13 08:00	09/18/13 13:59	100

Client Sample ID: WCSS-14-(0-0.25)

Lab Sample ID: 480-45969-3

Date Collected: 09/16/13 11:50

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.0

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.46		1.19	0.477	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1
Barium	60.5		0.596	0.131	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-14-(0-0.25)

Lab Sample ID: 480-45969-3

Date Collected: 09/16/13 11:50

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.0

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	7.43		0.238	0.0358	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1
Chromium	15.4		0.596	0.238	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1
Silver	<0.596		0.596	0.238	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1
Lead	164	^	0.596	0.286	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1
Selenium	1.03		0.596	0.477	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1
Antimony	<0.596	^	0.596	0.477	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1
Beryllium	0.197	J	0.238	0.0334	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1
Thallium	<1.19		1.19	0.358	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1
Nickel	38.0		1.19	0.274	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1
Vanadium	13.4		0.596	0.131	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1
Zinc	1770	B	2.98	0.182	mg/Kg	☼	09/18/13 10:50	09/18/13 22:46	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.27		1.15	0.0933	mg/Kg	☼	09/18/13 08:00	09/18/13 14:00	10

Client Sample ID: WCSS-15-(0-0.25)

Lab Sample ID: 480-45969-4

Date Collected: 09/16/13 11:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 96.8

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.81		1.08	0.434	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1
Barium	22.4		0.542	0.119	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1
Cadmium	0.433		0.217	0.0325	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1
Chromium	11.5		0.542	0.217	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1
Silver	<0.542		0.542	0.217	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1
Lead	58.9	^	0.542	0.260	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1
Selenium	<0.542		0.542	0.434	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1
Antimony	<0.542	^	0.542	0.434	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1
Beryllium	0.216	J	0.217	0.0304	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1
Thallium	<1.08		1.08	0.325	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1
Nickel	11.7		1.08	0.249	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1
Vanadium	10.6		0.542	0.119	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1
Zinc	88.1	B	2.71	0.166	mg/Kg	☼	09/18/13 10:50	09/18/13 22:48	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.100		0.0941	0.00762	mg/Kg	☼	09/18/13 08:00	09/18/13 11:28	1

Client Sample ID: WCSS-16-(0-0.25)

Lab Sample ID: 480-45969-5

Date Collected: 09/16/13 11:05

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.0

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.12		1.09	0.437	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1
Barium	101		0.547	0.120	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1
Cadmium	2.34		0.219	0.0328	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1
Chromium	41.7		0.547	0.219	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-16-(0-0.25)

Lab Sample ID: 480-45969-5

Date Collected: 09/16/13 11:05

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.0

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<0.547		0.547	0.219	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1
Lead	484	^	0.547	0.262	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1
Selenium	1.16		0.547	0.437	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1
Antimony	2.50	^	0.547	0.437	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1
Beryllium	0.543		0.219	0.0306	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1
Thallium	<1.09		1.09	0.328	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1
Nickel	50.5		1.09	0.252	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1
Vanadium	19.2		0.547	0.120	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1
Zinc	957	B	2.73	0.167	mg/Kg	☼	09/18/13 10:50	09/18/13 22:50	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.868		0.546	0.0442	mg/Kg	☼	09/18/13 08:00	09/18/13 14:02	5

Client Sample ID: WCSS-18-(0-0.25)

Lab Sample ID: 480-45969-6

Date Collected: 09/16/13 11:00

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 91.7

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.70		1.08	0.432	mg/Kg	☼	09/18/13 10:50	09/18/13 23:06	1
Barium	990		0.540	0.119	mg/Kg	☼	09/18/13 10:50	09/18/13 23:06	1
Cadmium	13.6		0.216	0.0324	mg/Kg	☼	09/18/13 10:50	09/18/13 23:06	1
Chromium	54.4		0.540	0.216	mg/Kg	☼	09/18/13 10:50	09/18/13 23:06	1
Silver	1.29		0.540	0.216	mg/Kg	☼	09/18/13 10:50	09/18/13 23:06	1
Lead	3400	^	0.540	0.259	mg/Kg	☼	09/18/13 10:50	09/18/13 23:06	1
Selenium	1.58		0.540	0.432	mg/Kg	☼	09/18/13 10:50	09/18/13 23:06	1
Antimony	18.5	^	0.540	0.432	mg/Kg	☼	09/18/13 10:50	09/18/13 23:06	1
Beryllium	0.784		0.216	0.0302	mg/Kg	☼	09/18/13 10:50	09/18/13 23:06	1
Thallium	<1.08		1.08	0.324	mg/Kg	☼	09/18/13 10:50	09/18/13 23:06	1
Nickel	130		1.08	0.248	mg/Kg	☼	09/18/13 10:50	09/18/13 23:06	1
Vanadium	25.1		0.540	0.119	mg/Kg	☼	09/18/13 10:50	09/18/13 23:06	1
Zinc	3190	B	5.40	0.331	mg/Kg	☼	09/18/13 10:50	09/19/13 15:07	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	72.8		10.8	0.873	mg/Kg	☼	09/18/13 08:00	09/18/13 14:10	100

Client Sample ID: WCSS-17-(0-0.25)

Lab Sample ID: 480-45969-7

Date Collected: 09/16/13 12:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00293		0.00293	0.000586	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,1,1-Trichloroethane	<0.00293		0.00293	0.000425	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,1,2,2-Tetrachloroethane	<0.00293		0.00293	0.000950	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,1,2-Trichloroethane	<0.00293		0.00293	0.000762	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,1-Dichloroethane	<0.00293		0.00293	0.000715	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,1-Dichloroethene	<0.00293		0.00293	0.000717	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-17-(0-0.25)

Lab Sample ID: 480-45969-7

Date Collected: 09/16/13 12:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	<0.00293		0.00293	0.000832	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,2,3-Trichlorobenzene	<0.00293		0.00293	0.000622	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,2,3-Trichloropropane	<0.00293		0.00293	0.000596	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,2,4-Trichlorobenzene	<0.00293		0.00293	0.000356	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,2,4-Trimethylbenzene	<0.00293		0.00293	0.00112	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,2-Dibromo-3-Chloropropane	<0.0293		0.0293	0.00293	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,2-Dichlorobenzene	<0.00293		0.00293	0.000458	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,2-Dichloroethane	<0.00293		0.00293	0.000294	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,2-Dichloropropane	<0.00293		0.00293	0.00293	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,3,5-Trimethylbenzene	<0.00293		0.00293	0.000377	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,3-Dichlorobenzene	<0.00293		0.00293	0.000301	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,3-Dichloropropane	<0.00293		0.00293	0.000351	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,4-Dichlorobenzene	<0.00293		0.00293	0.000820	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
1,4-Dioxane	<0.293	*	0.293	0.0282	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
2,2-Dichloropropane	<0.00293		0.00293	0.000996	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
2-Butanone (MEK)	<0.0293	*	0.0293	0.00214	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
2-Chlorotoluene	<0.00293		0.00293	0.000384	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
2-Hexanone	<0.0293		0.0293	0.00293	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
4-Chlorotoluene	<0.00293		0.00293	0.000691	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
4-Isopropyltoluene	<0.00293		0.00293	0.000470	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
4-Methyl-2-pentanone (MIBK)	<0.0293		0.0293	0.00192	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Acetone	<0.293		0.293	0.00493	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Benzene	<0.00293		0.00293	0.000287	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Bromobenzene	<0.00293		0.00293	0.00103	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Bromoform	<0.00293		0.00293	0.00293	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Bromomethane	<0.00586		0.00586	0.000527	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Carbon disulfide	<0.00293		0.00293	0.00293	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Carbon tetrachloride	<0.00293		0.00293	0.000567	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Chlorobenzene	<0.00293		0.00293	0.000773	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Chlorobromomethane	<0.00293		0.00293	0.000423	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Chlorodibromomethane	<0.00293		0.00293	0.000750	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Chloroethane	<0.00586		0.00586	0.00132	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Chloroform	<0.00293		0.00293	0.000362	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Chloromethane	<0.00586		0.00586	0.000354	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
cis-1,2-Dichloroethene	<0.00293		0.00293	0.000750	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
cis-1,3-Dichloropropene	<0.00293		0.00293	0.000844	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Dichlorobromomethane	<0.00293		0.00293	0.000785	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Dichlorodifluoromethane	<0.00586		0.00586	0.000484	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Ethyl ether	<0.00293		0.00293	0.00246	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Ethylbenzene	<0.00293		0.00293	0.000404	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Ethylene Dibromide	<0.00293		0.00293	0.000752	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Hexachlorobutadiene	<0.00293		0.00293	0.000687	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Isopropyl ether	<0.00293		0.00293	0.00293	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Isopropylbenzene	<0.00293		0.00293	0.000883	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Methyl tert-butyl ether	<0.00293		0.00293	0.000575	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Methylene Chloride	<0.00293		0.00293	0.00269	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
m-Xylene & p-Xylene	<0.00586		0.00586	0.000984	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
Naphthalene	<0.0293		0.0293	0.000785	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1
n-Butylbenzene	<0.00293		0.00293	0.000510	mg/Kg	☼	09/19/13 09:47	09/19/13 13:38	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-17-(0-0.25)

Lab Sample ID: 480-45969-7

Date Collected: 09/16/13 12:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	<0.00293		0.00293	0.000469	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
o-Xylene	<0.00293		0.00293	0.000765	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
sec-Butylbenzene	<0.00293		0.00293	0.000510	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
Styrene	<0.00293		0.00293	0.000293	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
Tert-amyl methyl ether	<0.00293		0.00293	0.00150	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
Tert-butyl ethyl ether	<0.00293		0.00293	0.00258	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
tert-Butylbenzene	<0.00293		0.00293	0.000609	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
Tetrachloroethene	<0.00293		0.00293	0.000786	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
Tetrahydrofuran	<0.0586		0.0586	0.00539	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
Toluene	<0.00293		0.00293	0.000443	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
trans-1,2-Dichloroethene	<0.00293		0.00293	0.000605	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
trans-1,3-Dichloropropene	<0.00293		0.00293	0.00258	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
Trichloroethene	<0.00293		0.00293	0.00129	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
Trichlorofluoromethane	<0.00586		0.00586	0.000554	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
Vinyl chloride	<0.00293		0.00293	0.000715	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1
Dibromomethane	<0.00293		0.00293	0.000603	mg/Kg	✱	09/19/13 09:47	09/19/13 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		70 - 130	09/19/13 09:47	09/19/13 13:38	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	09/19/13 09:47	09/19/13 13:38	1
4-Bromofluorobenzene (Surr)	102		70 - 130	09/19/13 09:47	09/19/13 13:38	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.0845	J	1.40	0.0561	mg/Kg	✱		09/23/13 14:26	5
C9-C12 Aliphatics (adjusted)	<1.40		1.40	0.0561	mg/Kg	✱		09/23/13 14:26	5

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.0845	J	1.16	0.0462	mg/Kg	✱	09/18/13 08:33	09/19/13 12:24	5
C9-C10 Aromatics	1.70		1.16	0.0462	mg/Kg	✱	09/18/13 08:33	09/19/13 12:24	5
C9-C12 Aliphatics (unadjusted)	1.23		1.16	0.0462	mg/Kg	✱	09/18/13 08:33	09/19/13 12:24	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	76		70 - 130	09/18/13 08:33	09/19/13 12:24	5
2,5-Dibromotoluene (pid)	83		70 - 130	09/18/13 08:33	09/19/13 12:24	5

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.535		0.535	0.0867	mg/Kg	✱	09/18/13 05:21	09/19/13 03:59	1
Acenaphthylene	<0.535		0.535	0.0963	mg/Kg	✱	09/18/13 05:21	09/19/13 03:59	1
Anthracene	0.164	J	0.535	0.102	mg/Kg	✱	09/18/13 05:21	09/19/13 03:59	1
Benzo[a]anthracene	1.07		0.535	0.0813	mg/Kg	✱	09/18/13 05:21	09/19/13 03:59	1
Benzo[a]pyrene	1.49		0.535	0.0770	mg/Kg	✱	09/18/13 05:21	09/19/13 03:59	1
Benzo[b]fluoranthene	1.88		0.535	0.0760	mg/Kg	✱	09/18/13 05:21	09/19/13 03:59	1
Benzo[g,h,i]perylene	1.22	B	0.535	0.0909	mg/Kg	✱	09/18/13 05:21	09/19/13 03:59	1
Benzo[k]fluoranthene	0.890		0.535	0.0781	mg/Kg	✱	09/18/13 05:21	09/19/13 03:59	1
2-Methylnaphthalene	<0.535		0.535	0.105	mg/Kg	✱	09/18/13 05:21	09/19/13 03:59	1
Chrysene	1.39		0.535	0.0952	mg/Kg	✱	09/18/13 05:21	09/19/13 03:59	1
Dibenz(a,h)anthracene	0.690	B	0.535	0.0749	mg/Kg	✱	09/18/13 05:21	09/19/13 03:59	1
Fluoranthene	1.97		0.535	0.0942	mg/Kg	✱	09/18/13 05:21	09/19/13 03:59	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-17-(0-0.25)

Lab Sample ID: 480-45969-7

Date Collected: 09/16/13 12:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.180	J	0.535	0.107	mg/Kg	☼	09/18/13 05:21	09/19/13 03:59	1
Indeno[1,2,3-cd]pyrene	1.25	B	0.535	0.0781	mg/Kg	☼	09/18/13 05:21	09/19/13 03:59	1
Naphthalene	<0.535		0.535	0.0899	mg/Kg	☼	09/18/13 05:21	09/19/13 03:59	1
Phenanthrene	1.06	B	0.535	0.107	mg/Kg	☼	09/18/13 05:21	09/19/13 03:59	1
Pyrene	1.93		0.535	0.0974	mg/Kg	☼	09/18/13 05:21	09/19/13 03:59	1
C11-C22 Aromatics (unadjusted)	51.4	B	5.35	2.14	mg/Kg	☼	09/18/13 05:21	09/19/13 03:59	1
C19-C36 Aliphatics	21.2		5.35	2.14	mg/Kg	☼	09/18/13 05:21	09/19/13 03:59	1
C9-C18 Aliphatics	2.16	J	5.35	2.14	mg/Kg	☼	09/18/13 05:21	09/19/13 03:59	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	36.2		5.61	5.61	mg/Kg	☼		09/20/13 10:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	53		40 - 140				09/18/13 05:21	09/19/13 03:59	1
2-Bromonaphthalene	94		40 - 140				09/18/13 05:21	09/19/13 03:59	1
2-Fluorobiphenyl	112		40 - 140				09/18/13 05:21	09/19/13 03:59	1
o-Terphenyl	65		40 - 140				09/18/13 05:21	09/19/13 03:59	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.68		1.14	0.456	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1
Barium	30.4		0.570	0.125	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1
Cadmium	0.199	J	0.228	0.0342	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1
Chromium	8.24		0.570	0.228	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1
Silver	<0.570		0.570	0.228	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1
Lead	99.4	^	0.570	0.274	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1
Selenium	<0.570		0.570	0.456	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1
Antimony	<0.570	^	0.570	0.456	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1
Beryllium	0.228		0.228	0.0319	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1
Thallium	<1.14		1.14	0.342	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1
Nickel	6.94		1.14	0.262	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1
Vanadium	16.7		0.570	0.125	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1
Zinc	68.4	B	2.85	0.174	mg/Kg	☼	09/18/13 10:50	09/18/13 23:09	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0836	J	0.115	0.00930	mg/Kg	☼	09/18/13 08:00	09/18/13 11:43	1

Client Sample ID: WCSS-19-(0-0.25)

Lab Sample ID: 480-45969-8

Date Collected: 09/16/13 12:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.0

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.08		1.14	0.455	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1
Barium	65.3		0.569	0.125	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1
Cadmium	0.697		0.227	0.0341	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1
Chromium	12.5		0.569	0.227	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1
Silver	<0.569		0.569	0.227	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1
Lead	239	^	0.569	0.273	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1
Selenium	<0.569		0.569	0.455	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-19-(0-0.25)

Lab Sample ID: 480-45969-8

Date Collected: 09/16/13 12:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.0

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.569	^	0.569	0.455	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1
Beryllium	0.803		0.227	0.0318	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1
Thallium	<1.14		1.14	0.341	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1
Nickel	15.1		1.14	0.262	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1
Vanadium	20.9		0.569	0.125	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1
Zinc	213	B	2.84	0.174	mg/Kg	☼	09/18/13 10:50	09/18/13 23:11	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.363		0.0979	0.00793	mg/Kg	☼	09/18/13 08:00	09/18/13 11:45	1

Client Sample ID: WCSS-20-(0-0.25)

Lab Sample ID: 480-45969-9

Date Collected: 09/16/13 12:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 88.0

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	29.8		1.16	0.465	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1
Barium	310		0.581	0.128	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1
Cadmium	18.5		0.232	0.0349	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1
Chromium	48.0		0.581	0.232	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1
Silver	0.714		0.581	0.232	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1
Lead	3280	^	0.581	0.279	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1
Selenium	2.37		0.581	0.465	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1
Antimony	3.56	^	0.581	0.465	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1
Beryllium	1.14		0.232	0.0325	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1
Thallium	<1.16		1.16	0.349	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1
Nickel	256		1.16	0.267	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1
Vanadium	34.8		0.581	0.128	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1
Zinc	1950	B	2.91	0.178	mg/Kg	☼	09/18/13 10:50	09/18/13 23:13	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.65		1.11	0.0899	mg/Kg	☼	09/18/13 08:00	09/18/13 14:11	10

Client Sample ID: WCSS-21-(0-0.25)

Lab Sample ID: 480-45969-10

Date Collected: 09/16/13 11:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 95.1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00230		0.00230	0.000460	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,1,1-Trichloroethane	<0.00230		0.00230	0.000334	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,1,2,2-Tetrachloroethane	<0.00230		0.00230	0.000746	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,1,2-Trichloroethane	<0.00230		0.00230	0.000598	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,1-Dichloroethane	<0.00230		0.00230	0.000561	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,1-Dichloroethene	<0.00230		0.00230	0.000563	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,1-Dichloropropene	<0.00230		0.00230	0.000653	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,2,3-Trichlorobenzene	<0.00230		0.00230	0.000488	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,2,3-Trichloropropane	<0.00230		0.00230	0.000468	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-21-(0-0.25)

Lab Sample ID: 480-45969-10

Date Collected: 09/16/13 11:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 95.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.00230		0.00230	0.000279	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,2,4-Trimethylbenzene	<0.00230		0.00230	0.000883	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,2-Dibromo-3-Chloropropane	<0.0230		0.0230	0.00230	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,2-Dichlorobenzene	<0.00230		0.00230	0.000359	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,2-Dichloroethane	<0.00230		0.00230	0.000231	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,2-Dichloropropane	<0.00230		0.00230	0.00230	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,3,5-Trimethylbenzene	<0.00230		0.00230	0.000296	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,3-Dichlorobenzene	<0.00230		0.00230	0.000236	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,3-Dichloropropane	<0.00230		0.00230	0.000276	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,4-Dichlorobenzene	<0.00230		0.00230	0.000644	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
1,4-Dioxane	<0.230	*	0.230	0.0222	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
2,2-Dichloropropane	<0.00230		0.00230	0.000781	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
2-Butanone (MEK)	<0.0230	*	0.0230	0.00168	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
2-Chlorotoluene	<0.00230		0.00230	0.000302	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
2-Hexanone	<0.0230		0.0230	0.00230	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
4-Chlorotoluene	<0.00230		0.00230	0.000542	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
4-Isopropyltoluene	<0.00230		0.00230	0.000369	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
4-Methyl-2-pentanone (MIBK)	<0.0230		0.0230	0.00151	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Acetone	<0.230		0.230	0.00387	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Benzene	<0.00230		0.00230	0.000225	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Bromobenzene	<0.00230		0.00230	0.000809	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Bromoform	<0.00230		0.00230	0.00230	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Bromomethane	<0.00460		0.00460	0.000414	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Carbon disulfide	<0.00230		0.00230	0.00230	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Carbon tetrachloride	<0.00230		0.00230	0.000445	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Chlorobenzene	<0.00230		0.00230	0.000607	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Chlorobromomethane	<0.00230		0.00230	0.000332	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Chlorodibromomethane	<0.00230		0.00230	0.000588	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Chloroethane	<0.00460		0.00460	0.00104	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Chloroform	<0.00230		0.00230	0.000284	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Chloromethane	<0.00460		0.00460	0.000278	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
cis-1,2-Dichloroethene	<0.00230		0.00230	0.000588	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
cis-1,3-Dichloropropene	<0.00230		0.00230	0.000662	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Dichlorobromomethane	<0.00230		0.00230	0.000616	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Dichlorodifluoromethane	<0.00460		0.00460	0.000380	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Ethyl ether	<0.00230		0.00230	0.00193	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Ethylbenzene	<0.00230		0.00230	0.000317	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Ethylene Dibromide	<0.00230		0.00230	0.000590	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Hexachlorobutadiene	<0.00230		0.00230	0.000539	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Isopropyl ether	<0.00230		0.00230	0.00230	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Isopropylbenzene	<0.00230		0.00230	0.000693	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Methyl tert-butyl ether	<0.00230		0.00230	0.000451	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Methylene Chloride	<0.00230		0.00230	0.00211	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
m-Xylene & p-Xylene	<0.00460		0.00460	0.000772	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Naphthalene	<0.0230		0.0230	0.000616	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
n-Butylbenzene	<0.00230		0.00230	0.000400	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
N-Propylbenzene	<0.00230		0.00230	0.000368	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
o-Xylene	<0.00230		0.00230	0.000600	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
sec-Butylbenzene	<0.00230		0.00230	0.000400	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-21-(0-0.25)

Lab Sample ID: 480-45969-10

Date Collected: 09/16/13 11:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 95.1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	<0.00230		0.00230	0.000230	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Tert-amyl methyl ether	<0.00230		0.00230	0.00118	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Tert-butyl ethyl ether	<0.00230		0.00230	0.00202	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
tert-Butylbenzene	<0.00230		0.00230	0.000478	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Tetrachloroethene	<0.00230		0.00230	0.000617	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Tetrahydrofuran	<0.0460		0.0460	0.00423	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Toluene	<0.00230		0.00230	0.000348	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
trans-1,2-Dichloroethene	<0.00230		0.00230	0.000474	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
trans-1,3-Dichloropropene	<0.00230		0.00230	0.00202	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Trichloroethene	<0.00230		0.00230	0.00101	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Trichlorofluoromethane	<0.00460		0.00460	0.000435	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Vinyl chloride	<0.00230		0.00230	0.000561	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1
Dibromomethane	<0.00230		0.00230	0.000473	mg/Kg	☼	09/19/13 09:47	09/19/13 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130	09/19/13 09:47	09/19/13 14:04	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130	09/19/13 09:47	09/19/13 14:04	1
4-Bromofluorobenzene (Surr)	97		70 - 130	09/19/13 09:47	09/19/13 14:04	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.0552	J	0.263	0.0105	mg/Kg	☼		09/23/13 14:26	1
C9-C12 Aliphatics (adjusted)	0.0591	J	0.263	0.0105	mg/Kg	☼		09/23/13 14:26	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.0636	J	0.144	0.00576	mg/Kg	☼	09/18/13 08:33	09/19/13 16:07	1
C9-C10 Aromatics	0.319		0.144	0.00576	mg/Kg	☼	09/18/13 08:33	09/19/13 16:07	1
C9-C12 Aliphatics (unadjusted)	0.383		0.144	0.00576	mg/Kg	☼	09/18/13 08:33	09/19/13 16:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	76		70 - 130	09/18/13 08:33	09/19/13 16:07	1
2,5-Dibromotoluene (pid)	81		70 - 130	09/18/13 08:33	09/19/13 16:07	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.495		0.495	0.0802	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Acenaphthylene	<0.495		0.495	0.0891	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Anthracene	0.193	J	0.495	0.0941	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Benzo[a]anthracene	0.706		0.495	0.0753	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Benzo[a]pyrene	1.17		0.495	0.0713	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Benzo[b]fluoranthene	1.34		0.495	0.0703	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Benzo[g,h,i]perylene	0.876	B	0.495	0.0842	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Benzo[k]fluoranthene	0.652		0.495	0.0723	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
2-Methylnaphthalene	<0.495		0.495	0.0971	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Chrysene	0.999		0.495	0.0881	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Dibenz(a,h)anthracene	0.644	B	0.495	0.0693	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Fluoranthene	1.90		0.495	0.0872	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Fluorene	0.163	J	0.495	0.0990	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Indeno[1,2,3-cd]pyrene	0.947	B	0.495	0.0723	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Naphthalene	<0.495		0.495	0.0832	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-21-(0-0.25)

Lab Sample ID: 480-45969-10

Date Collected: 09/16/13 11:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 95.1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	0.929	B	0.495	0.0990	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Pyrene	1.27		0.495	0.0901	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
C11-C22 Aromatics (unadjusted)	44.8	B	4.95	1.98	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
C19-C36 Aliphatics	54.4		4.95	1.98	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
C9-C18 Aliphatics	3.73	J	4.95	1.98	mg/Kg	☼	09/18/13 05:21	09/19/13 04:28	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	33.1		5.26	5.26	mg/Kg	☼		09/20/13 10:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	27	X	40 - 140				09/18/13 05:21	09/19/13 04:28	1
2-Bromonaphthalene	91		40 - 140				09/18/13 05:21	09/19/13 04:28	1
2-Fluorobiphenyl	112		40 - 140				09/18/13 05:21	09/19/13 04:28	1
o-Terphenyl	30	X	40 - 140				09/18/13 05:21	09/19/13 04:28	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.91		0.954	0.382	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1
Barium	75.5		0.477	0.105	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1
Cadmium	4.53		0.191	0.0286	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1
Chromium	305		0.477	0.191	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1
Silver	0.825		0.477	0.191	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1
Lead	418	^	0.477	0.229	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1
Selenium	1.93		0.477	0.382	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1
Antimony	4.66	^	0.477	0.382	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1
Beryllium	0.461		0.191	0.0267	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1
Thallium	<0.954		0.954	0.286	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1
Nickel	100		0.954	0.220	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1
Vanadium	29.5		0.477	0.105	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1
Zinc	596	B	2.39	0.146	mg/Kg	☼	09/18/13 10:50	09/18/13 23:16	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.30		0.485	0.0393	mg/Kg	☼	09/18/13 08:00	09/18/13 14:13	5

Client Sample ID: WCSS-22-(0-0.25)

Lab Sample ID: 480-45969-11

Date Collected: 09/16/13 10:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.2

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.29		0.977	0.391	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1
Barium	124		0.488	0.107	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1
Cadmium	3.15		0.195	0.0293	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1
Chromium	66.7		0.488	0.195	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1
Silver	0.783		0.488	0.195	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1
Lead	668	^	0.488	0.234	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1
Selenium	1.38		0.488	0.391	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1
Antimony	2.90	^	0.488	0.391	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1
Beryllium	1.96		0.195	0.0274	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1
Thallium	<0.977		0.977	0.293	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-22-(0-0.25)

Lab Sample ID: 480-45969-11

Date Collected: 09/16/13 10:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.2

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	129		0.977	0.225	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1
Vanadium	22.4		0.488	0.107	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1
Zinc	1330	B	2.44	0.149	mg/Kg	☼	09/18/13 10:50	09/18/13 23:18	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.46		0.968	0.0784	mg/Kg	☼	09/18/13 08:00	09/18/13 14:17	10

Client Sample ID: WCSS-23-(0-0.25)

Lab Sample ID: 480-45969-12

Date Collected: 09/16/13 13:10

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.7

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0977		0.0977	0.0195	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,1,1-Trichloroethane	<0.0977		0.0977	0.0142	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,1,2,2-Tetrachloroethane	<0.0977		0.0977	0.0317	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,1,2-Trichloroethane	<0.0977		0.0977	0.0254	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,1-Dichloroethane	<0.0977		0.0977	0.0238	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,1-Dichloroethene	<0.0977		0.0977	0.0239	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,1-Dichloropropene	<0.0977		0.0977	0.0277	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,2,3-Trichlorobenzene	<0.0977		0.0977	0.0208	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,2,3-Trichloropropane	<0.0977		0.0977	0.0199	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,2,4-Trichlorobenzene	<0.0977		0.0977	0.0119	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,2,4-Trimethylbenzene	<0.0977		0.0977	0.0375	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,2-Dibromo-3-Chloropropane	<0.977		0.977	0.0977	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,2-Dichlorobenzene	<0.0977		0.0977	0.0153	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,2-Dichloroethane	<0.0977		0.0977	0.00981	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,2-Dichloropropane	<0.0977		0.0977	0.0977	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,3,5-Trimethylbenzene	<0.0977		0.0977	0.0126	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,3-Dichlorobenzene	<0.0977		0.0977	0.0100	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,3-Dichloropropane	<0.0977		0.0977	0.0117	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,4-Dichlorobenzene	<0.0977		0.0977	0.0274	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
1,4-Dioxane	<9.77		9.77	0.942	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
2,2-Dichloropropane	<0.0977		0.0977	0.0332	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
2-Butanone (MEK)	<0.977	*	0.977	0.0715	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
2-Chlorotoluene	<0.0977		0.0977	0.0128	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
2-Hexanone	<0.977		0.977	0.0977	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
4-Chlorotoluene	<0.0977		0.0977	0.0231	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
4-Isopropyltoluene	<0.0977		0.0977	0.0157	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
4-Methyl-2-pentanone (MIBK)	<0.977		0.977	0.0641	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Acetone	<9.77		9.77	0.165	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Benzene	<0.0977		0.0977	0.00958	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Bromobenzene	<0.0977		0.0977	0.0344	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Bromoform	<0.0977		0.0977	0.0977	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Bromomethane	0.0474	J	0.195	0.0176	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Carbon disulfide	<0.0977		0.0977	0.0977	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Carbon tetrachloride	<0.0977		0.0977	0.0189	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Chlorobenzene	<0.0977		0.0977	0.0258	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Chlorobromomethane	<0.0977		0.0977	0.0141	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-23-(0-0.25)

Lab Sample ID: 480-45969-12

Date Collected: 09/16/13 13:10

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.7

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodibromomethane	<0.0977		0.0977	0.0250	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Chloroethane	<0.195		0.195	0.0442	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Chloroform	<0.0977		0.0977	0.0121	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Chloromethane	0.0532	J	0.195	0.0118	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
cis-1,2-Dichloroethene	0.0363	J	0.0977	0.0250	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
cis-1,3-Dichloropropene	<0.0977		0.0977	0.0281	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Dichlorobromomethane	<0.0977		0.0977	0.0262	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Dichlorodifluoromethane	0.120	J	0.195	0.0161	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Ethyl ether	<0.0977		0.0977	0.0821	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Ethylbenzene	<0.0977		0.0977	0.0135	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Ethylene Dibromide	<0.0977		0.0977	0.0251	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Hexachlorobutadiene	<0.0977		0.0977	0.0229	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Isopropyl ether	<0.0977		0.0977	0.0977	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Isopropylbenzene	<0.0977		0.0977	0.0295	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Methyl tert-butyl ether	<0.0977		0.0977	0.0192	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Methylene Chloride	<0.0977		0.0977	0.0899	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
m-Xylene & p-Xylene	<0.195		0.195	0.0328	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Naphthalene	0.0337	J	0.977	0.0262	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
n-Butylbenzene	<0.0977		0.0977	0.0170	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
N-Propylbenzene	<0.0977		0.0977	0.0156	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
o-Xylene	<0.0977		0.0977	0.0255	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
sec-Butylbenzene	<0.0977		0.0977	0.0170	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Styrene	<0.0977		0.0977	0.00977	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Tert-amyl methyl ether	<0.0977		0.0977	0.0500	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Tert-butyl ethyl ether	<0.0977		0.0977	0.0860	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
tert-Butylbenzene	<0.0977		0.0977	0.0203	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Tetrachloroethene	1.59		0.0977	0.0262	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Tetrahydrofuran	<1.95		1.95	0.180	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Toluene	<0.0977		0.0977	0.0148	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
trans-1,2-Dichloroethene	<0.0977		0.0977	0.0202	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
trans-1,3-Dichloropropene	<0.0977		0.0977	0.0860	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Trichloroethene	0.110		0.0977	0.0430	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Trichlorofluoromethane	0.0379	J	0.195	0.0185	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Vinyl chloride	0.0509	J	0.0977	0.0238	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Dibromomethane	<0.0977		0.0977	0.0201	mg/Kg	☼	09/18/13 14:57	09/20/13 01:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130				09/18/13 14:57	09/20/13 01:48	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 130				09/18/13 14:57	09/20/13 01:48	1
4-Bromofluorobenzene (Surr)	98		70 - 130				09/18/13 14:57	09/20/13 01:48	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.411	J	2.64	0.106	mg/Kg	☼		09/23/13 14:27	10
C9-C12 Aliphatics (adjusted)	<2.64		2.64	0.106	mg/Kg	☼		09/23/13 14:27	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.411	J	2.03	0.0811	mg/Kg	☼	09/18/13 08:33	09/18/13 15:05	10
C9-C10 Aromatics	2.34		2.03	0.0811	mg/Kg	☼	09/18/13 08:33	09/18/13 15:05	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-23-(0-0.25)

Lab Sample ID: 480-45969-12

Date Collected: 09/16/13 13:10

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.7

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C9-C12 Aliphatics (unadjusted)	2.21		2.03	0.0811	mg/Kg	☼	09/18/13 08:33	09/18/13 15:05	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	76		70 - 130				09/18/13 08:33	09/18/13 15:05	10
2,5-Dibromotoluene (pid)	84		70 - 130				09/18/13 08:33	09/18/13 15:05	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.176	J	0.517	0.0838	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Acenaphthylene	0.354	J	0.517	0.0931	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Anthracene	0.397	J	0.517	0.0982	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Benzo[a]anthracene	2.00		0.517	0.0786	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Benzo[a]pyrene	3.00		0.517	0.0745	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Benzo[b]fluoranthene	3.18		0.517	0.0734	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Benzo[g,h,i]perylene	2.45	B	0.517	0.0879	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Benzo[k]fluoranthene	1.43		0.517	0.0755	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
2-Methylnaphthalene	0.133	J	0.517	0.101	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Chrysene	2.53		0.517	0.0920	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Dibenz(a,h)anthracene	1.24	B	0.517	0.0724	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Fluoranthene	2.78		0.517	0.0910	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Fluorene	0.302	J	0.517	0.103	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Indeno[1,2,3-cd]pyrene	2.45	B	0.517	0.0755	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Naphthalene	0.116	J	0.517	0.0869	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Phenanthrene	1.29	B	0.517	0.103	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Pyrene	3.16		0.517	0.0941	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
C11-C22 Aromatics (unadjusted)	128	B	5.17	2.07	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
C19-C36 Aliphatics	221		5.17	2.07	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
C9-C18 Aliphatics	59.0		5.17	2.07	mg/Kg	☼	09/18/13 05:21	09/19/13 04:58	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	101		5.28	5.28	mg/Kg	☼		09/20/13 10:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	19	X	40 - 140				09/18/13 05:21	09/19/13 04:58	1
2-Bromonaphthalene	90		40 - 140				09/18/13 05:21	09/19/13 04:58	1
2-Fluorobiphenyl	108		40 - 140				09/18/13 05:21	09/19/13 04:58	1
o-Terphenyl	22	X	40 - 140				09/18/13 05:21	09/19/13 04:58	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	34.4		1.07	0.429	mg/Kg	☼	09/18/13 10:50	09/18/13 23:20	1
Barium	4750		5.36	1.18	mg/Kg	☼	09/18/13 10:50	09/19/13 15:10	10
Cadmium	14.6		0.214	0.0322	mg/Kg	☼	09/18/13 10:50	09/18/13 23:20	1
Chromium	119		0.536	0.214	mg/Kg	☼	09/18/13 10:50	09/18/13 23:20	1
Silver	2.13		0.536	0.214	mg/Kg	☼	09/18/13 10:50	09/18/13 23:20	1
Lead	13100		5.36	2.57	mg/Kg	☼	09/18/13 10:50	09/19/13 15:10	10
Selenium	4.77		0.536	0.429	mg/Kg	☼	09/18/13 10:50	09/18/13 23:20	1
Antimony	112	^	0.536	0.429	mg/Kg	☼	09/18/13 10:50	09/18/13 23:20	1
Beryllium	1.21		0.214	0.0300	mg/Kg	☼	09/18/13 10:50	09/18/13 23:20	1
Thallium	<1.07		1.07	0.322	mg/Kg	☼	09/18/13 10:50	09/18/13 23:20	1
Nickel	109		1.07	0.247	mg/Kg	☼	09/18/13 10:50	09/18/13 23:20	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-23-(0-0.25)

Lab Sample ID: 480-45969-12

Date Collected: 09/16/13 13:10

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.7

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	46.6		0.536	0.118	mg/Kg	☼	09/18/13 10:50	09/18/13 23:20	1
Zinc	10000	B	26.8	1.64	mg/Kg	☼	09/18/13 10:50	09/19/13 15:10	10

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	6.55		2.18	0.176	mg/Kg	☼	09/18/13 08:00	09/18/13 14:23	20

Client Sample ID: WCSS-25-(0-0.25)

Lab Sample ID: 480-45969-13

Date Collected: 09/16/13 13:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 82.2

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00514		0.00514	0.00103	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,1,1-Trichloroethane	<0.00514		0.00514	0.000746	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,1,2,2-Tetrachloroethane	<0.00514		0.00514	0.00167	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,1,2-Trichloroethane	<0.00514		0.00514	0.00134	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,1-Dichloroethane	<0.00514		0.00514	0.00125	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,1-Dichloroethene	<0.00514		0.00514	0.00126	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,1-Dichloropropene	<0.00514		0.00514	0.00146	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,2,3-Trichlorobenzene	<0.00514		0.00514	0.00109	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,2,3-Trichloropropane	<0.00514		0.00514	0.00105	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,2,4-Trichlorobenzene	<0.00514		0.00514	0.000624	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,2,4-Trimethylbenzene	<0.00514		0.00514	0.00197	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,2-Dibromo-3-Chloropropane	<0.0514		0.0514	0.00514	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,2-Dichlorobenzene	<0.00514		0.00514	0.000803	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,2-Dichloroethane	<0.00514		0.00514	0.000516	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,2-Dichloropropane	<0.00514		0.00514	0.00514	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,3,5-Trimethylbenzene	<0.00514		0.00514	0.000661	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,3-Dichlorobenzene	<0.00514		0.00514	0.000528	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,3-Dichloropropane	<0.00514		0.00514	0.000616	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,4-Dichlorobenzene	<0.00514		0.00514	0.00144	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
1,4-Dioxane	<0.514	*	0.514	0.0495	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
2,2-Dichloropropane	<0.00514		0.00514	0.00175	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
2-Butanone (MEK)	<0.0514	*	0.0514	0.00376	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
2-Chlorotoluene	<0.00514		0.00514	0.000674	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
2-Hexanone	<0.0514		0.0514	0.00514	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
4-Chlorotoluene	<0.00514		0.00514	0.00121	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
4-Isopropyltoluene	<0.00514		0.00514	0.000824	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
4-Methyl-2-pentanone (MIBK)	<0.0514		0.0514	0.00337	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Acetone	<0.514		0.514	0.00865	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Benzene	<0.00514		0.00514	0.000503	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Bromobenzene	<0.00514		0.00514	0.00181	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Bromoform	<0.00514		0.00514	0.00514	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Bromomethane	<0.0103		0.0103	0.000924	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Carbon disulfide	<0.00514		0.00514	0.00514	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Carbon tetrachloride	<0.00514		0.00514	0.000994	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Chlorobenzene	<0.00514		0.00514	0.00136	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Chlorobromomethane	<0.00514		0.00514	0.000742	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Chlorodibromomethane	<0.00514		0.00514	0.00131	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-25-(0-0.25)

Lab Sample ID: 480-45969-13

Date Collected: 09/16/13 13:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 82.2

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<0.0103		0.0103	0.00232	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Chloroform	<0.00514		0.00514	0.000635	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Chloromethane	<0.0103		0.0103	0.000620	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
cis-1,2-Dichloroethene	<0.00514		0.00514	0.00131	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
cis-1,3-Dichloropropene	<0.00514		0.00514	0.00148	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Dichlorobromomethane	<0.00514		0.00514	0.00138	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Dichlorodifluoromethane	<0.0103		0.0103	0.000848	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Ethyl ether	<0.00514		0.00514	0.00431	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Ethylbenzene	<0.00514		0.00514	0.000709	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Ethylene Dibromide	<0.00514		0.00514	0.00132	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Hexachlorobutadiene	<0.00514		0.00514	0.00120	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Isopropyl ether	<0.00514		0.00514	0.00514	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Isopropylbenzene	<0.00514		0.00514	0.00155	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Methyl tert-butyl ether	<0.00514		0.00514	0.00101	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Methylene Chloride	<0.00514		0.00514	0.00472	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
m-Xylene & p-Xylene	<0.0103		0.0103	0.00173	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Naphthalene	<0.0514		0.0514	0.00138	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
n-Butylbenzene	<0.00514		0.00514	0.000894	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
N-Propylbenzene	<0.00514		0.00514	0.000822	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
o-Xylene	<0.00514		0.00514	0.00134	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
sec-Butylbenzene	<0.00514		0.00514	0.000894	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Styrene	<0.00514		0.00514	0.000514	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Tert-amyl methyl ether	<0.00514		0.00514	0.00263	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Tert-butyl ethyl ether	<0.00514		0.00514	0.00452	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
tert-Butylbenzene	<0.00514		0.00514	0.00107	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Tetrachloroethene	<0.00514		0.00514	0.00138	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Tetrahydrofuran	<0.103		0.103	0.00945	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Toluene	<0.00514		0.00514	0.000776	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
trans-1,2-Dichloroethene	<0.00514		0.00514	0.00106	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
trans-1,3-Dichloropropene	<0.00514		0.00514	0.00452	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Trichloroethene	<0.00514		0.00514	0.00226	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Trichlorofluoromethane	<0.0103		0.0103	0.000972	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Vinyl chloride	<0.00514		0.00514	0.00125	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1
Dibromomethane	<0.00514		0.00514	0.00106	mg/Kg	☼	09/19/13 09:47	09/19/13 14:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130	09/19/13 09:47	09/19/13 14:29	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 130	09/19/13 09:47	09/19/13 14:29	1
4-Bromofluorobenzene (Surr)	97		70 - 130	09/19/13 09:47	09/19/13 14:29	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.127	J	1.52	0.0608	mg/Kg	☼		09/23/13 14:26	5
C9-C12 Aliphatics (adjusted)	<1.52		1.52	0.0608	mg/Kg	☼		09/23/13 14:26	5

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.127	J	1.37	0.0549	mg/Kg	☼	09/18/13 08:33	09/19/13 13:02	5
C9-C10 Aromatics	0.867	J	1.37	0.0549	mg/Kg	☼	09/18/13 08:33	09/19/13 13:02	5
C9-C12 Aliphatics (unadjusted)	0.802	J	1.37	0.0549	mg/Kg	☼	09/18/13 08:33	09/19/13 13:02	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-25-(0-0.25)

Lab Sample ID: 480-45969-13

Date Collected: 09/16/13 13:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 82.2

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	76		70 - 130				09/18/13 08:33	09/19/13 13:02	5
2,5-Dibromotoluene (pid)	81		70 - 130				09/18/13 08:33	09/19/13 13:02	5

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.211	J	0.597	0.0967	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Acenaphthylene	<0.597		0.597	0.107	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Anthracene	0.670		0.597	0.113	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Benzo[a]anthracene	4.08		0.597	0.0907	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Benzo[a]pyrene	5.20		0.597	0.0859	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Benzo[b]fluoranthene	7.26		0.597	0.0847	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Benzo[g,h,i]perylene	3.77	B	0.597	0.101	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Benzo[k]fluoranthene	2.94		0.597	0.0871	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
2-Methylnaphthalene	0.168	J	0.597	0.117	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Chrysene	6.32		0.597	0.106	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Dibenz(a,h)anthracene	2.06	B	0.597	0.0835	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Fluoranthene	10.6		0.597	0.105	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Fluorene	0.375	J	0.597	0.119	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Indeno[1,2,3-cd]pyrene	3.92	B	0.597	0.0871	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Naphthalene	0.162	J	0.597	0.100	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Phenanthrene	4.44	B	0.597	0.119	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Pyrene	8.42		0.597	0.109	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
C11-C22 Aromatics (unadjusted)	235	B	5.97	2.39	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
C19-C36 Aliphatics	226		5.97	2.39	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
C9-C18 Aliphatics	6.58		5.97	2.39	mg/Kg	☼	09/18/13 05:21	09/19/13 05:27	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	174		6.08	6.08	mg/Kg	☼		09/20/13 10:00	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	42		40 - 140				09/18/13 05:21	09/19/13 05:27	1
2-Bromonaphthalene	95		40 - 140				09/18/13 05:21	09/19/13 05:27	1
2-Fluorobiphenyl	112		40 - 140				09/18/13 05:21	09/19/13 05:27	1
o-Terphenyl	46		40 - 140				09/18/13 05:21	09/19/13 05:27	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.97		1.18	0.474	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1
Barium	238		0.592	0.130	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1
Cadmium	10.9		0.237	0.0355	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1
Chromium	71.3		0.592	0.237	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1
Silver	1.11		0.592	0.237	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1
Lead	1230	^	0.592	0.284	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1
Selenium	2.15		0.592	0.474	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1
Antimony	3.02	^	0.592	0.474	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1
Beryllium	0.593		0.237	0.0331	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1
Thallium	<1.18		1.18	0.355	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1
Nickel	101		1.18	0.272	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1
Vanadium	57.6		0.592	0.130	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1
Zinc	2240	B	2.96	0.181	mg/Kg	☼	09/18/13 10:50	09/18/13 23:27	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-25-(0-0.25)

Lab Sample ID: 480-45969-13

Date Collected: 09/16/13 13:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 82.2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.10		1.17	0.0944	mg/Kg	☼	09/18/13 08:00	09/18/13 14:25	10

Client Sample ID: WCSS-24-(0-0.25)

Lab Sample ID: 480-45969-14

Date Collected: 09/16/13 12:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.81		1.02	0.409	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1
Barium	161		0.511	0.113	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1
Cadmium	4.16		0.205	0.0307	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1
Chromium	107		0.511	0.205	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1
Silver	0.855		0.511	0.205	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1
Lead	1960	^	0.511	0.245	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1
Selenium	2.16		0.511	0.409	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1
Antimony	0.481	J ^	0.511	0.409	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1
Beryllium	0.416		0.205	0.0286	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1
Thallium	0.505	J	1.02	0.307	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1
Nickel	134		1.02	0.235	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1
Vanadium	96.6		0.511	0.113	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1
Zinc	1350	B	2.56	0.157	mg/Kg	☼	09/18/13 10:50	09/18/13 23:30	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.85		2.27	0.184	mg/Kg	☼	09/18/13 08:00	09/18/13 14:27	20

Client Sample ID: WCSS-26-(0-0.25)

Lab Sample ID: 480-45969-15

Date Collected: 09/16/13 14:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.3

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.139		0.139	0.0278	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,1,1-Trichloroethane	<0.139		0.139	0.0201	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,1,2,2-Tetrachloroethane	<0.139		0.139	0.0450	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,1,2-Trichloroethane	<0.139		0.139	0.0361	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,1-Dichloroethane	<0.139		0.139	0.0339	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,1-Dichloroethene	<0.139		0.139	0.0340	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,1-Dichloropropene	<0.139		0.139	0.0394	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,2,3-Trichlorobenzene	<0.139		0.139	0.0295	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,2,3-Trichloropropane	<0.139		0.139	0.0283	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,2,4-Trichlorobenzene	<0.139		0.139	0.0169	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,2,4-Trimethylbenzene	<0.139		0.139	0.0533	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,2-Dibromo-3-Chloropropane	<1.39		1.39	0.139	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,2-Dichlorobenzene	<0.139		0.139	0.0217	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,2-Dichloroethane	<0.139		0.139	0.0139	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,2-Dichloropropane	<0.139		0.139	0.139	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,3,5-Trimethylbenzene	<0.139		0.139	0.0179	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,3-Dichlorobenzene	<0.139		0.139	0.0143	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,3-Dichloropropane	<0.139		0.139	0.0167	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-26-(0-0.25)

Lab Sample ID: 480-45969-15

Date Collected: 09/16/13 14:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.139		0.139	0.0389	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
1,4-Dioxane	<13.9		13.9	1.34	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
2,2-Dichloropropane	<0.139		0.139	0.0472	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
2-Butanone (MEK)	<1.39	*	1.39	0.102	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
2-Chlorotoluene	<0.139		0.139	0.0182	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
2-Hexanone	<1.39		1.39	0.139	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
4-Chlorotoluene	<0.139		0.139	0.0327	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
4-Isopropyltoluene	<0.139		0.139	0.0223	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
4-Methyl-2-pentanone (MIBK)	<1.39		1.39	0.0910	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Acetone	<13.9		13.9	0.234	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Benzene	<0.139		0.139	0.0136	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Bromobenzene	<0.139		0.139	0.0488	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Bromoform	<0.139		0.139	0.139	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Bromomethane	<0.278		0.278	0.0250	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Carbon disulfide	<0.139		0.139	0.139	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Carbon tetrachloride	<0.139		0.139	0.0269	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Chlorobenzene	<0.139		0.139	0.0366	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Chlorobromomethane	<0.139		0.139	0.0200	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Chlorodibromomethane	<0.139		0.139	0.0355	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Chloroethane	<0.278		0.278	0.0627	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Chloroform	<0.139		0.139	0.0172	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Chloromethane	<0.278		0.278	0.0168	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
cis-1,2-Dichloroethene	0.548		0.139	0.0355	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
cis-1,3-Dichloropropene	<0.139		0.139	0.0400	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Dichlorobromomethane	<0.139		0.139	0.0372	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Dichlorodifluoromethane	<0.278		0.278	0.0229	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Ethyl ether	<0.139		0.139	0.117	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Ethylbenzene	<0.139		0.139	0.0191	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Ethylene Dibromide	<0.139		0.139	0.0356	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Hexachlorobutadiene	<0.139		0.139	0.0325	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Isopropyl ether	<0.139		0.139	0.139	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Isopropylbenzene	<0.139		0.139	0.0418	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Methyl tert-butyl ether	<0.139		0.139	0.0273	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Methylene Chloride	<0.139		0.139	0.128	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
m-Xylene & p-Xylene	<0.278		0.278	0.0466	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Naphthalene	<1.39		1.39	0.0372	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
n-Butylbenzene	<0.139		0.139	0.0241	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
N-Propylbenzene	<0.139		0.139	0.0222	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
o-Xylene	<0.139		0.139	0.0362	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
sec-Butylbenzene	<0.139		0.139	0.0241	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Styrene	<0.139		0.139	0.0139	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Tert-amyl methyl ether	<0.139		0.139	0.0710	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Tert-butyl ethyl ether	<0.139		0.139	0.122	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
tert-Butylbenzene	<0.139		0.139	0.0289	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Tetrachloroethene	3.94		0.139	0.0372	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Tetrahydrofuran	<2.78		2.78	0.255	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Toluene	<0.139		0.139	0.0210	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
trans-1,2-Dichloroethene	<0.139		0.139	0.0286	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
trans-1,3-Dichloropropene	<0.139		0.139	0.122	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-26-(0-0.25)

Lab Sample ID: 480-45969-15

Date Collected: 09/16/13 14:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.3

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	0.402		0.139	0.0611	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Trichlorofluoromethane	<0.278		0.278	0.0263	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Vinyl chloride	<0.139		0.139	0.0339	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Dibromomethane	<0.139		0.139	0.0286	mg/Kg	☼	09/18/13 14:57	09/20/13 02:11	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		70 - 130				09/18/13 14:57	09/20/13 02:11	2
1,2-Dichloroethane-d4 (Surr)	110		70 - 130				09/18/13 14:57	09/20/13 02:11	2
4-Bromofluorobenzene (Surr)	98		70 - 130				09/18/13 14:57	09/20/13 02:11	2

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.697	J	1.32	0.0530	mg/Kg	☼		09/23/13 14:26	5
C9-C12 Aliphatics (adjusted)	<1.32		1.32	0.0530	mg/Kg	☼		09/23/13 14:26	5

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.697	J	0.762	0.0305	mg/Kg	☼	09/18/13 08:33	09/19/13 13:44	5
C9-C10 Aromatics	0.608	J	0.762	0.0305	mg/Kg	☼	09/18/13 08:33	09/19/13 13:44	5
C9-C12 Aliphatics (unadjusted)	0.609	J	0.762	0.0305	mg/Kg	☼	09/18/13 08:33	09/19/13 13:44	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	76		70 - 130				09/18/13 08:33	09/19/13 13:44	5
2,5-Dibromotoluene (pid)	82		70 - 130				09/18/13 08:33	09/19/13 13:44	5

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.521		0.521	0.0843	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Acenaphthylene	<0.521		0.521	0.0937	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Anthracene	0.101	J	0.521	0.0989	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Benzo[a]anthracene	0.424	J	0.521	0.0791	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Benzo[a]pyrene	0.954		0.521	0.0750	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Benzo[b]fluoranthene	1.11		0.521	0.0739	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Benzo[g,h,i]perylene	1.13	B	0.521	0.0885	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Benzo[k]fluoranthene	0.529		0.521	0.0760	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
2-Methylnaphthalene	<0.521		0.521	0.102	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Chrysene	0.627		0.521	0.0927	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Dibenz(a,h)anthracene	0.752	B	0.521	0.0729	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Fluoranthene	0.727		0.521	0.0916	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Fluorene	0.175	J	0.521	0.104	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Indeno[1,2,3-cd]pyrene	1.11	B	0.521	0.0760	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Naphthalene	<0.521		0.521	0.0875	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Phenanthrene	0.504	J B	0.521	0.104	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Pyrene	0.698		0.521	0.0947	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
C11-C22 Aromatics (unadjusted)	37.4	B	5.21	2.08	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
C19-C36 Aliphatics	51.1		5.21	2.08	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
C9-C18 Aliphatics	2.83	J	5.21	2.08	mg/Kg	☼	09/18/13 05:21	09/19/13 06:01	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	28.5		5.30	5.30	mg/Kg	☼		09/20/13 10:00	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-26-(0-0.25)

Lab Sample ID: 480-45969-15

Date Collected: 09/16/13 14:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	44		40 - 140	09/18/13 05:21	09/19/13 06:01	1
2-Bromonaphthalene	93		40 - 140	09/18/13 05:21	09/19/13 06:01	1
2-Fluorobiphenyl	110		40 - 140	09/18/13 05:21	09/19/13 06:01	1
o-Terphenyl	51		40 - 140	09/18/13 05:21	09/19/13 06:01	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.80		1.06	0.425	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1
Barium	25.7		0.531	0.117	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1
Cadmium	0.282		0.212	0.0318	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1
Chromium	15.2		0.531	0.212	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1
Silver	<0.531		0.531	0.212	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1
Lead	77.8	^	0.531	0.255	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1
Selenium	0.848		0.531	0.425	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1
Antimony	<0.531	^	0.531	0.425	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1
Beryllium	0.197	J	0.212	0.0297	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1
Thallium	<1.06		1.06	0.318	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1
Nickel	16.1		1.06	0.244	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1
Vanadium	14.6		0.531	0.117	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1
Zinc	92.0	B	2.65	0.162	mg/Kg	☼	09/18/13 10:50	09/18/13 23:32	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.131		0.108	0.00874	mg/Kg	☼	09/18/13 08:00	09/18/13 14:29	1

Client Sample ID: WCSS-27-(0-0.25)

Lab Sample ID: 480-45969-16

Date Collected: 09/16/13 14:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.6

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0937		0.0937	0.0187	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,1,1-Trichloroethane	<0.0937		0.0937	0.0136	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,1,2,2-Tetrachloroethane	<0.0937		0.0937	0.0304	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,1,2-Trichloroethane	<0.0937		0.0937	0.0244	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,1-Dichloroethane	<0.0937		0.0937	0.0229	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,1-Dichloroethene	<0.0937		0.0937	0.0229	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,1-Dichloropropene	<0.0937		0.0937	0.0266	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,2,3-Trichlorobenzene	<0.0937		0.0937	0.0199	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,2,3-Trichloropropane	<0.0937		0.0937	0.0191	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,2,4-Trichlorobenzene	<0.0937		0.0937	0.0114	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,2,4-Trimethylbenzene	<0.0937		0.0937	0.0360	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,2-Dibromo-3-Chloropropane	<0.937		0.937	0.0937	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,2-Dichlorobenzene	<0.0937		0.0937	0.0147	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,2-Dichloroethane	<0.0937		0.0937	0.00941	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,2-Dichloropropane	<0.0937		0.0937	0.0937	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,3,5-Trimethylbenzene	<0.0937		0.0937	0.0121	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,3-Dichlorobenzene	<0.0937		0.0937	0.00963	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,3-Dichloropropane	<0.0937		0.0937	0.0112	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,4-Dichlorobenzene	1.07		0.0937	0.0262	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
1,4-Dioxane	<9.37		9.37	0.903	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-27-(0-0.25)

Lab Sample ID: 480-45969-16

Date Collected: 09/16/13 14:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.6

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	<0.0937		0.0937	0.0319	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
2-Butanone (MEK)	<0.937	*	0.937	0.0686	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
2-Chlorotoluene	<0.0937		0.0937	0.0123	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
2-Hexanone	<0.937		0.937	0.0937	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
4-Chlorotoluene	<0.0937		0.0937	0.0221	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
4-Isopropyltoluene	<0.0937		0.0937	0.0150	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
4-Methyl-2-pentanone (MIBK)	<0.937		0.937	0.0615	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Acetone	<9.37		9.37	0.158	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Benzene	<0.0937		0.0937	0.00918	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Bromobenzene	<0.0937		0.0937	0.0330	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Bromoform	<0.0937		0.0937	0.0937	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Bromomethane	<0.187		0.187	0.0169	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Carbon disulfide	<0.0937		0.0937	0.0937	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Carbon tetrachloride	<0.0937		0.0937	0.0181	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Chlorobenzene	<0.0937		0.0937	0.0247	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Chlorobromomethane	<0.0937		0.0937	0.0135	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Chlorodibromomethane	<0.0937		0.0937	0.0240	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Chloroethane	<0.187		0.187	0.0424	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Chloroform	<0.0937		0.0937	0.0116	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Chloromethane	<0.187		0.187	0.0113	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
cis-1,2-Dichloroethene	<0.0937		0.0937	0.0240	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
cis-1,3-Dichloropropene	<0.0937		0.0937	0.0270	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Dichlorobromomethane	<0.0937		0.0937	0.0251	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Dichlorodifluoromethane	<0.187		0.187	0.0155	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Ethyl ether	<0.0937		0.0937	0.0787	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Ethylbenzene	<0.0937		0.0937	0.0129	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Ethylene Dibromide	<0.0937		0.0937	0.0241	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Hexachlorobutadiene	<0.0937		0.0937	0.0220	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Isopropyl ether	<0.0937		0.0937	0.0937	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Isopropylbenzene	<0.0937		0.0937	0.0283	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Methyl tert-butyl ether	<0.0937		0.0937	0.0184	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Methylene Chloride	<0.0937		0.0937	0.0862	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
m-Xylene & p-Xylene	<0.187		0.187	0.0315	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Naphthalene	0.0298	J	0.937	0.0251	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
n-Butylbenzene	<0.0937		0.0937	0.0163	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
N-Propylbenzene	<0.0937		0.0937	0.0150	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
o-Xylene	<0.0937		0.0937	0.0245	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
sec-Butylbenzene	<0.0937		0.0937	0.0163	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Styrene	<0.0937		0.0937	0.00937	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Tert-amyl methyl ether	<0.0937		0.0937	0.0480	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Tert-butyl ethyl ether	<0.0937		0.0937	0.0825	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
tert-Butylbenzene	<0.0937		0.0937	0.0195	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Tetrachloroethene	0.0923	J	0.0937	0.0252	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Tetrahydrofuran	<1.87		1.87	0.172	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Toluene	<0.0937		0.0937	0.0142	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
trans-1,2-Dichloroethene	<0.0937		0.0937	0.0193	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
trans-1,3-Dichloropropene	<0.0937		0.0937	0.0825	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Trichloroethene	<0.0937		0.0937	0.0412	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Trichlorofluoromethane	<0.187		0.187	0.0177	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-27-(0-0.25)

Lab Sample ID: 480-45969-16

Date Collected: 09/16/13 14:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.6

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.0937		0.0937	0.0229	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Dibromomethane	<0.0937		0.0937	0.0193	mg/Kg	☼	09/18/13 14:57	09/20/13 02:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130				09/18/13 14:57	09/20/13 02:35	1
1,2-Dichloroethane-d4 (Surr)	111		70 - 130				09/18/13 14:57	09/20/13 02:35	1
4-Bromofluorobenzene (Surr)	98		70 - 130				09/18/13 14:57	09/20/13 02:35	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.0484	J	0.285	0.0114	mg/Kg	☼		09/23/13 14:26	1
C9-C12 Aliphatics (adjusted)	<0.285		0.285	0.0114	mg/Kg	☼		09/23/13 14:26	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.0520	J	0.174	0.00694	mg/Kg	☼	09/18/13 08:33	09/19/13 16:46	1
C9-C10 Aromatics	0.580		0.174	0.00694	mg/Kg	☼	09/18/13 08:33	09/19/13 16:46	1
C9-C12 Aliphatics (unadjusted)	0.270		0.174	0.00694	mg/Kg	☼	09/18/13 08:33	09/19/13 16:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	82		70 - 130				09/18/13 08:33	09/19/13 16:46	1
2,5-Dibromotoluene (pid)	85		70 - 130				09/18/13 08:33	09/19/13 16:46	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.565		0.565	0.0915	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Acenaphthylene	<0.565		0.565	0.102	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Anthracene	<0.565		0.565	0.107	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Benzo[a]anthracene	<0.565		0.565	0.0859	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Benzo[a]pyrene	0.0936	J	0.565	0.0814	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Benzo[b]fluoranthene	0.164	J	0.565	0.0802	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Benzo[g,h,i]perylene	<0.565		0.565	0.0961	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Benzo[k]fluoranthene	<0.565		0.565	0.0825	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
2-Methylnaphthalene	0.632		0.565	0.111	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Chrysene	0.119	J	0.565	0.101	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Dibenz(a,h)anthracene	<0.565		0.565	0.0791	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Fluoranthene	0.238	J	0.565	0.0994	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Fluorene	0.255	J	0.565	0.113	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Indeno[1,2,3-cd]pyrene	<0.565		0.565	0.0825	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Naphthalene	1.03		0.565	0.0949	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Phenanthrene	0.500	J B	0.565	0.113	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Pyrene	0.190	J	0.565	0.103	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
C11-C22 Aromatics (unadjusted)	12.1	B	5.65	2.26	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
C19-C36 Aliphatics	160		5.65	2.26	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
C9-C18 Aliphatics	23.5		5.65	2.26	mg/Kg	☼	09/18/13 05:21	09/19/13 06:30	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	8.84		5.71	5.71	mg/Kg	☼		09/20/13 10:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	22	X	40 - 140				09/18/13 05:21	09/19/13 06:30	1
2-Bromonaphthalene	89		40 - 140				09/18/13 05:21	09/19/13 06:30	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-27-(0-0.25)

Lab Sample ID: 480-45969-16

Date Collected: 09/16/13 14:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.6

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	108		40 - 140	09/18/13 05:21	09/19/13 06:30	1
o-Terphenyl	55		40 - 140	09/18/13 05:21	09/19/13 06:30	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.33		0.998	0.399	mg/Kg	☼	09/18/13 10:50	09/18/13 23:34	1
Barium	69.9		0.499	0.110	mg/Kg	☼	09/18/13 10:50	09/18/13 23:34	1
Cadmium	1.94		0.200	0.0299	mg/Kg	☼	09/18/13 10:50	09/18/13 23:34	1
Chromium	213		0.499	0.200	mg/Kg	☼	09/18/13 10:50	09/18/13 23:34	1
Silver	<2.49		2.49	0.998	mg/Kg	☼	09/18/13 10:50	09/19/13 15:17	5
Lead	1300		2.49	1.20	mg/Kg	☼	09/18/13 10:50	09/19/13 15:17	5
Selenium	3.04		0.499	0.399	mg/Kg	☼	09/18/13 10:50	09/18/13 23:34	1
Antimony	<0.499	^ L	0.499	0.399	mg/Kg	☼	09/18/13 10:50	09/18/13 23:34	1
Beryllium	0.130	J	0.200	0.0279	mg/Kg	☼	09/18/13 10:50	09/18/13 23:34	1
Thallium	0.418	J	0.998	0.299	mg/Kg	☼	09/18/13 10:50	09/18/13 23:34	1
Nickel	288		4.99	1.15	mg/Kg	☼	09/18/13 10:50	09/19/13 15:17	5
Vanadium	102		2.49	0.549	mg/Kg	☼	09/18/13 10:50	09/19/13 15:17	5
Zinc	544	B	2.49	0.153	mg/Kg	☼	09/18/13 10:50	09/18/13 23:34	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.664		0.108	0.00878	mg/Kg	☼	09/18/13 08:00	09/18/13 14:31	1

Client Sample ID: WCSS-28-(0-0.25)

Lab Sample ID: 480-45969-17

Date Collected: 09/16/13 13:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 93.7

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00239		0.00239	0.000479	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,1,1-Trichloroethane	<0.00239		0.00239	0.000348	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,1,2,2-Tetrachloroethane	<0.00239		0.00239	0.000777	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,1,2-Trichloroethane	<0.00239		0.00239	0.000623	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,1-Dichloroethane	<0.00239		0.00239	0.000584	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,1-Dichloroethene	<0.00239		0.00239	0.000586	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,1-Dichloropropene	<0.00239		0.00239	0.000680	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,2,3-Trichlorobenzene	<0.00239		0.00239	0.000509	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,2,3-Trichloropropane	<0.00239		0.00239	0.000488	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,2,4-Trichlorobenzene	<0.00239		0.00239	0.000291	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,2,4-Trimethylbenzene	<0.00239		0.00239	0.000920	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,2-Dibromo-3-Chloropropane	<0.0239		0.0239	0.00239	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,2-Dichlorobenzene	<0.00239		0.00239	0.000375	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,2-Dichloroethane	<0.00239		0.00239	0.000240	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,2-Dichloropropane	<0.00239		0.00239	0.00239	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,3,5-Trimethylbenzene	<0.00239		0.00239	0.000308	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,3-Dichlorobenzene	<0.00239		0.00239	0.000246	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,3-Dichloropropane	<0.00239		0.00239	0.000287	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,4-Dichlorobenzene	<0.00239		0.00239	0.000671	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
1,4-Dioxane	<0.239	*	0.239	0.0231	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
2,2-Dichloropropane	<0.00239		0.00239	0.000814	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-28-(0-0.25)

Lab Sample ID: 480-45969-17

Date Collected: 09/16/13 13:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 93.7

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<0.0239	*	0.0239	0.00175	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
2-Chlorotoluene	<0.00239		0.00239	0.000314	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
2-Hexanone	<0.0239		0.0239	0.00239	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
4-Chlorotoluene	<0.00239		0.00239	0.000565	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
4-Isopropyltoluene	<0.00239		0.00239	0.000384	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
4-Methyl-2-pentanone (MIBK)	<0.0239		0.0239	0.00157	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Acetone	<0.239		0.239	0.00403	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Benzene	<0.00239		0.00239	0.000235	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Bromobenzene	<0.00239		0.00239	0.000843	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Bromoform	<0.00239		0.00239	0.00239	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Bromomethane	<0.00479		0.00479	0.000431	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Carbon disulfide	<0.00239		0.00239	0.00239	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Carbon tetrachloride	<0.00239		0.00239	0.000464	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Chlorobenzene	<0.00239		0.00239	0.000632	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Chlorobromomethane	<0.00239		0.00239	0.000346	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Chlorodibromomethane	<0.00239		0.00239	0.000613	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Chloroethane	<0.00479		0.00479	0.00108	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Chloroform	<0.00239		0.00239	0.000296	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Chloromethane	<0.00479		0.00479	0.000289	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
cis-1,2-Dichloroethene	<0.00239		0.00239	0.000613	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
cis-1,3-Dichloropropene	<0.00239		0.00239	0.000690	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Dichlorobromomethane	<0.00239		0.00239	0.000642	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Dichlorodifluoromethane	<0.00479		0.00479	0.000396	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Ethyl ether	<0.00239		0.00239	0.00201	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Ethylbenzene	<0.00239		0.00239	0.000330	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Ethylene Dibromide	<0.00239		0.00239	0.000615	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Hexachlorobutadiene	<0.00239		0.00239	0.000561	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Isopropyl ether	<0.00239		0.00239	0.00239	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Isopropylbenzene	<0.00239		0.00239	0.000722	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Methyl tert-butyl ether	<0.00239		0.00239	0.000470	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Methylene Chloride	<0.00239		0.00239	0.00220	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
m-Xylene & p-Xylene	<0.00479		0.00479	0.000805	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Naphthalene	<0.0239		0.0239	0.000642	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
n-Butylbenzene	<0.00239		0.00239	0.000417	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
N-Propylbenzene	<0.00239		0.00239	0.000383	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
o-Xylene	<0.00239		0.00239	0.000626	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
sec-Butylbenzene	<0.00239		0.00239	0.000417	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Styrene	<0.00239		0.00239	0.000239	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Tert-amyl methyl ether	<0.00239		0.00239	0.00123	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Tert-butyl ethyl ether	<0.00239		0.00239	0.00211	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
tert-Butylbenzene	<0.00239		0.00239	0.000498	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Tetrachloroethene	0.00194	J	0.00239	0.000643	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Tetrahydrofuran	<0.0479		0.0479	0.00441	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Toluene	<0.00239		0.00239	0.000362	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
trans-1,2-Dichloroethene	<0.00239		0.00239	0.000494	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
trans-1,3-Dichloropropene	<0.00239		0.00239	0.00211	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Trichloroethene	<0.00239		0.00239	0.00105	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Trichlorofluoromethane	<0.00479		0.00479	0.000453	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Vinyl chloride	<0.00239		0.00239	0.000584	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-28-(0-0.25)

Lab Sample ID: 480-45969-17

Date Collected: 09/16/13 13:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 93.7

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	<0.00239		0.00239	0.000493	mg/Kg	☼	09/19/13 09:47	09/19/13 14:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130				09/19/13 09:47	09/19/13 14:55	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130				09/19/13 09:47	09/19/13 14:55	1
4-Bromofluorobenzene (Surr)	100		70 - 130				09/19/13 09:47	09/19/13 14:55	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<0.267		0.267	0.0107	mg/Kg	☼		09/23/13 14:27	1
C9-C12 Aliphatics (adjusted)	<0.267		0.267	0.0107	mg/Kg	☼		09/23/13 14:27	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<1.34		1.34	0.0535	mg/Kg	☼	09/18/13 08:33	09/18/13 18:17	10
C9-C10 Aromatics	1.21	J	1.34	0.0535	mg/Kg	☼	09/18/13 08:33	09/18/13 18:17	10
C9-C12 Aliphatics (unadjusted)	0.854	J	1.34	0.0535	mg/Kg	☼	09/18/13 08:33	09/18/13 18:17	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	75		70 - 130				09/18/13 08:33	09/18/13 18:17	10
2,5-Dibromotoluene (pid)	81		70 - 130				09/18/13 08:33	09/18/13 18:17	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.512		0.512	0.0829	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Acenaphthylene	0.157	J	0.512	0.0921	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Anthracene	0.357	J	0.512	0.0972	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Benzo[a]anthracene	1.29		0.512	0.0778	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Benzo[a]pyrene	1.66		0.512	0.0737	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Benzo[b]fluoranthene	2.10		0.512	0.0726	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Benzo[g,h,i]perylene	1.41	B	0.512	0.0870	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Benzo[k]fluoranthene	1.14		0.512	0.0747	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
2-Methylnaphthalene	<0.512		0.512	0.100	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Chrysene	1.55		0.512	0.0911	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Dibenz(a,h)anthracene	0.881	B	0.512	0.0716	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Fluoranthene	1.93		0.512	0.0900	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Fluorene	0.187	J	0.512	0.102	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Indeno[1,2,3-cd]pyrene	1.44	B	0.512	0.0747	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Naphthalene	<0.512		0.512	0.0859	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Phenanthrene	1.22	B	0.512	0.102	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Pyrene	1.94		0.512	0.0931	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
C11-C22 Aromatics (unadjusted)	71.7	B	5.12	2.05	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
C19-C36 Aliphatics	14.3		5.12	2.05	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
C9-C18 Aliphatics	<5.12		5.12	2.05	mg/Kg	☼	09/18/13 05:21	09/19/13 07:00	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	54.4		5.34	5.34	mg/Kg	☼		09/20/13 10:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	15	X	40 - 140				09/18/13 05:21	09/19/13 07:00	1
2-Bromonaphthalene	89		40 - 140				09/18/13 05:21	09/19/13 07:00	1
2-Fluorobiphenyl	103		40 - 140				09/18/13 05:21	09/19/13 07:00	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-28-(0-0.25)

Lab Sample ID: 480-45969-17

Date Collected: 09/16/13 13:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 93.7

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	18	X	40 - 140	09/18/13 05:21	09/19/13 07:00	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.45		0.976	0.390	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1
Barium	28.9		0.488	0.107	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1
Cadmium	0.783		0.195	0.0293	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1
Chromium	30.6		0.488	0.195	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1
Silver	<0.488		0.488	0.195	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1
Lead	143	^	0.488	0.234	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1
Selenium	0.499		0.488	0.390	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1
Antimony	<0.488	^	0.488	0.390	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1
Beryllium	0.217		0.195	0.0273	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1
Thallium	<0.976		0.976	0.293	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1
Nickel	34.8		0.976	0.224	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1
Vanadium	25.1		0.488	0.107	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1
Zinc	177	B	2.44	0.149	mg/Kg	☼	09/18/13 10:50	09/18/13 23:37	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.178		0.0987	0.00799	mg/Kg	☼	09/18/13 08:00	09/18/13 14:33	1

Client Sample ID: WCSS-29-(0-0.25)

Lab Sample ID: 480-45969-18

Date Collected: 09/16/13 14:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.6

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.47		1.16	0.463	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1
Barium	178		0.579	0.127	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1
Cadmium	5.32		0.232	0.0347	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1
Chromium	105		0.579	0.232	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1
Silver	0.891		0.579	0.232	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1
Lead	1280	^	0.579	0.278	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1
Selenium	2.27		0.579	0.463	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1
Antimony	5.48	^	0.579	0.463	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1
Beryllium	0.316		0.232	0.0324	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1
Thallium	<1.16		1.16	0.347	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1
Nickel	130		1.16	0.266	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1
Vanadium	41.2		0.579	0.127	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1
Zinc	2080	B	2.89	0.177	mg/Kg	☼	09/18/13 10:50	09/18/13 23:39	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	5.57		2.10	0.170	mg/Kg	☼	09/18/13 08:00	09/18/13 12:18	20

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-30-(0-0.25)

Lab Sample ID: 480-45969-19

Date Collected: 09/16/13 14:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.2

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.47		1.01	0.403	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1
Barium	37.1		0.504	0.111	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1
Cadmium	0.346		0.202	0.0302	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1
Chromium	19.1		0.504	0.202	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1
Silver	<0.504		0.504	0.202	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1
Lead	78.2	^	0.504	0.242	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1
Selenium	0.869	B	0.504	0.403	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1
Antimony	<0.504	^	0.504	0.403	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1
Beryllium	0.366		0.202	0.0282	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1
Thallium	<1.01		1.01	0.302	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1
Nickel	18.2		1.01	0.232	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1
Vanadium	20.3		0.504	0.111	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1
Zinc	91.7	B	2.52	0.154	mg/Kg	☼	09/18/13 10:50	09/18/13 23:47	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0771	J	0.112	0.00906	mg/Kg	☼	09/18/13 08:00	09/18/13 14:35	1

Client Sample ID: WCSS-31-(0-0.25)

Lab Sample ID: 480-45969-20

Date Collected: 09/16/13 10:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 95.1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.36		1.02	0.410	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1
Barium	26.2		0.512	0.113	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1
Cadmium	0.206		0.205	0.0307	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1
Chromium	10.9		0.512	0.205	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1
Silver	<0.512		0.512	0.205	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1
Lead	52.1	^	0.512	0.246	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1
Selenium	0.667	B	0.512	0.410	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1
Antimony	<0.512	^	0.512	0.410	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1
Beryllium	0.238		0.205	0.0287	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1
Thallium	<1.02		1.02	0.307	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1
Nickel	11.8		1.02	0.236	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1
Vanadium	21.4		0.512	0.113	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1
Zinc	62.5	B	2.56	0.157	mg/Kg	☼	09/18/13 10:50	09/18/13 23:54	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0756	J	0.102	0.00823	mg/Kg	☼	09/18/13 08:00	09/18/13 14:36	1

Client Sample ID: WCSS-32-(0-0.25)

Lab Sample ID: 480-45969-21

Date Collected: 09/16/13 14:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.4

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.24		0.968	0.387	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1
Barium	45.6		0.484	0.107	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-32-(0-0.25)

Lab Sample ID: 480-45969-21

Date Collected: 09/16/13 14:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.4

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.981		0.194	0.0291	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1
Chromium	49.6		0.484	0.194	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1
Silver	<0.484		0.484	0.194	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1
Lead	202	^	0.484	0.232	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1
Selenium	1.24	B	0.484	0.387	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1
Antimony	<0.484	^	0.484	0.387	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1
Beryllium	0.348		0.194	0.0271	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1
Thallium	<0.968		0.968	0.291	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1
Nickel	54.7		0.968	0.223	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1
Vanadium	37.7		0.484	0.107	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1
Zinc	222	B	2.42	0.148	mg/Kg	☼	09/18/13 10:50	09/18/13 23:56	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.177		0.109	0.00879	mg/Kg	☼	09/18/13 08:00	09/18/13 14:38	1

Client Sample ID: WCSS-33-(0-0.25)

Lab Sample ID: 480-45969-22

Date Collected: 09/16/13 15:20

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.2

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00400		0.00400	0.000799	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,1,1-Trichloroethane	<0.00400		0.00400	0.000580	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,1,2,2-Tetrachloroethane	<0.00400		0.00400	0.00130	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,1,2-Trichloroethane	<0.00400		0.00400	0.00104	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,1-Dichloroethane	<0.00400		0.00400	0.000975	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,1-Dichloroethene	<0.00400		0.00400	0.000978	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,1-Dichloropropene	<0.00400		0.00400	0.00114	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,2,3-Trichlorobenzene	<0.00400		0.00400	0.000849	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,2,3-Trichloropropane	<0.00400		0.00400	0.000814	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,2,4-Trichlorobenzene	<0.00400		0.00400	0.000486	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,2,4-Trimethylbenzene	<0.00400		0.00400	0.00153	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,2-Dibromo-3-Chloropropane	<0.0400		0.0400	0.00400	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,2-Dichlorobenzene	<0.00400		0.00400	0.000625	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,2-Dichloroethane	<0.00400		0.00400	0.000401	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,2-Dichloropropane	<0.00400		0.00400	0.00400	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,3,5-Trimethylbenzene	<0.00400		0.00400	0.000515	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,3-Dichlorobenzene	<0.00400		0.00400	0.000411	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,3-Dichloropropane	<0.00400		0.00400	0.000480	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,4-Dichlorobenzene	<0.00400		0.00400	0.00112	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
1,4-Dioxane	<0.400	*	0.400	0.0385	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
2,2-Dichloropropane	<0.00400		0.00400	0.00136	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
2-Butanone (MEK)	<0.0400	*	0.0400	0.00293	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
2-Chlorotoluene	<0.00400		0.00400	0.000524	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
2-Hexanone	<0.0400		0.0400	0.00400	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
4-Chlorotoluene	<0.00400		0.00400	0.000943	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
4-Isopropyltoluene	<0.00400		0.00400	0.000641	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
4-Methyl-2-pentanone (MIBK)	<0.0400		0.0400	0.00262	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Acetone	<0.400		0.400	0.00673	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-33-(0-0.25)

Lab Sample ID: 480-45969-22

Date Collected: 09/16/13 15:20

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.2

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00400		0.00400	0.000392	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Bromobenzene	<0.00400		0.00400	0.00141	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Bromoform	<0.00400		0.00400	0.00400	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Bromomethane	<0.00799		0.00799	0.000719	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Carbon disulfide	<0.00400		0.00400	0.00400	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Carbon tetrachloride	<0.00400		0.00400	0.000774	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Chlorobenzene	<0.00400		0.00400	0.00106	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Chlorobromomethane	<0.00400		0.00400	0.000577	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Chlorodibromomethane	<0.00400		0.00400	0.00102	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Chloroethane	<0.00799		0.00799	0.00181	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Chloroform	<0.00400		0.00400	0.000494	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Chloromethane	<0.00799		0.00799	0.000483	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
cis-1,2-Dichloroethene	<0.00400		0.00400	0.00102	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
cis-1,3-Dichloropropene	<0.00400		0.00400	0.00115	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Dichlorobromomethane	<0.00400		0.00400	0.00107	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Dichlorodifluoromethane	<0.00799		0.00799	0.000660	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Ethyl ether	<0.00400		0.00400	0.00336	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Ethylbenzene	<0.00400		0.00400	0.000552	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Ethylene Dibromide	<0.00400		0.00400	0.00103	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Hexachlorobutadiene	<0.00400		0.00400	0.000937	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Isopropyl ether	<0.00400		0.00400	0.00400	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Isopropylbenzene	<0.00400		0.00400	0.00121	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Methyl tert-butyl ether	<0.00400		0.00400	0.000785	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Methylene Chloride	<0.00400		0.00400	0.00368	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
m-Xylene & p-Xylene	<0.00799		0.00799	0.00134	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Naphthalene	<0.0400		0.0400	0.00107	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
n-Butylbenzene	<0.00400		0.00400	0.000695	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
N-Propylbenzene	<0.00400		0.00400	0.000640	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
o-Xylene	<0.00400		0.00400	0.00104	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
sec-Butylbenzene	<0.00400		0.00400	0.000695	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Styrene	<0.00400		0.00400	0.000400	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Tert-amyl methyl ether	<0.00400		0.00400	0.00205	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Tert-butyl ethyl ether	<0.00400		0.00400	0.00352	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
tert-Butylbenzene	<0.00400		0.00400	0.000831	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Tetrachloroethene	<0.00400		0.00400	0.00107	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Tetrahydrofuran	<0.0799		0.0799	0.00735	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Toluene	<0.00400		0.00400	0.000604	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
trans-1,2-Dichloroethene	<0.00400		0.00400	0.000825	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
trans-1,3-Dichloropropene	<0.00400		0.00400	0.00352	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Trichloroethene	<0.00400		0.00400	0.00176	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Trichlorofluoromethane	<0.00799		0.00799	0.000756	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Vinyl chloride	<0.00400		0.00400	0.000975	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Dibromomethane	<0.00400		0.00400	0.000823	mg/Kg	☼	09/19/13 09:47	09/19/13 15:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		70 - 130				09/19/13 09:47	09/19/13 15:20	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130				09/19/13 09:47	09/19/13 15:20	1
4-Bromofluorobenzene (Surr)	97		70 - 130				09/19/13 09:47	09/19/13 15:20	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-33-(0-0.25)

Lab Sample ID: 480-45969-22

Date Collected: 09/16/13 15:20

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.2

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.0530	J	0.293	0.0117	mg/Kg	☼		09/23/13 14:26	1
C9-C12 Aliphatics (adjusted)	<0.293		0.293	0.0117	mg/Kg	☼		09/23/13 14:26	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.0718	J	0.196	0.00783	mg/Kg	☼	09/18/13 08:33	09/21/13 12:07	1
C9-C10 Aromatics	0.429		0.196	0.00783	mg/Kg	☼	09/18/13 08:33	09/21/13 12:07	1
C9-C12 Aliphatics (unadjusted)	0.339		0.196	0.00783	mg/Kg	☼	09/18/13 08:33	09/21/13 12:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	102		70 - 130	09/18/13 08:33	09/21/13 12:07	1
2,5-Dibromotoluene (pid)	100		70 - 130	09/18/13 08:33	09/21/13 12:07	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.550		0.550	0.0892	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Acenaphthylene	<0.550		0.550	0.0991	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Anthracene	0.203	J	0.550	0.105	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Benzo[a]anthracene	1.27		0.550	0.0837	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Benzo[a]pyrene	1.63		0.550	0.0793	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Benzo[b]fluoranthene	2.08		0.550	0.0782	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Benzo[g,h,i]perylene	2.24	B	0.550	0.0936	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Benzo[k]fluoranthene	1.07		0.550	0.0804	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
2-Methylnaphthalene	0.125	J	0.550	0.108	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Chrysene	1.50		0.550	0.0980	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Dibenz(a,h)anthracene	1.27	B	0.550	0.0771	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Fluoranthene	1.46		0.550	0.0969	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Fluorene	0.322	J	0.550	0.110	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Indeno[1,2,3-cd]pyrene	1.81	B	0.550	0.0804	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Naphthalene	<0.550		0.550	0.0925	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Phenanthrene	0.892	B	0.550	0.110	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
Pyrene	1.51		0.550	0.100	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
C11-C22 Aromatics (unadjusted)	92.2	B	5.50	2.20	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
C19-C36 Aliphatics	165		5.50	2.20	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1
C9-C18 Aliphatics	4.60	J	5.50	2.20	mg/Kg	☼	09/18/13 05:21	09/19/13 07:59	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	74.8		5.87	5.87	mg/Kg	☼		09/20/13 10:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	29	X	40 - 140	09/18/13 05:21	09/19/13 07:59	1
2-Bromonaphthalene	95		40 - 140	09/18/13 05:21	09/19/13 07:59	1
2-Fluorobiphenyl	111		40 - 140	09/18/13 05:21	09/19/13 07:59	1
o-Terphenyl	35	X	40 - 140	09/18/13 05:21	09/19/13 07:59	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	19.8		1.15	0.459	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1
Barium	208		0.573	0.126	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1
Cadmium	7.21		0.229	0.0344	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1
Chromium	109		0.573	0.229	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-33-(0-0.25)

Lab Sample ID: 480-45969-22

Date Collected: 09/16/13 15:20

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.2

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	1.77		0.573	0.229	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1
Lead	1470	^	0.573	0.275	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1
Selenium	2.89	B	0.573	0.459	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1
Antimony	5.34	^	0.573	0.459	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1
Beryllium	0.605		0.229	0.0321	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1
Thallium	<1.15		1.15	0.344	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1
Nickel	178		1.15	0.264	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1
Vanadium	67.0		0.573	0.126	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1
Zinc	1740	B	2.87	0.175	mg/Kg	☼	09/18/13 10:50	09/18/13 23:59	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.65		2.16	0.175	mg/Kg	☼	09/18/13 08:00	09/18/13 12:34	20

Client Sample ID: WCSS-34-(0-0.25)

Lab Sample ID: 480-45969-23

Date Collected: 09/16/13 15:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.0

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00415		0.00415	0.000830	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,1,1-Trichloroethane	<0.00415		0.00415	0.000603	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,1,2,2-Tetrachloroethane	<0.00415		0.00415	0.00135	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,1,2-Trichloroethane	<0.00415		0.00415	0.00108	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,1-Dichloroethane	<0.00415		0.00415	0.00101	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,1-Dichloroethene	<0.00415		0.00415	0.00102	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,1-Dichloropropene	<0.00415		0.00415	0.00118	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,2,3-Trichlorobenzene	<0.00415		0.00415	0.000882	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,2,3-Trichloropropane	<0.00415		0.00415	0.000845	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,2,4-Trichlorobenzene	<0.00415		0.00415	0.000505	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,2,4-Trimethylbenzene	<0.00415		0.00415	0.00159	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,2-Dibromo-3-Chloropropane	<0.0415		0.0415	0.00415	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,2-Dichlorobenzene	<0.00415		0.00415	0.000649	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,2-Dichloroethane	<0.00415		0.00415	0.000417	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,2-Dichloropropane	<0.00415		0.00415	0.00415	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,3,5-Trimethylbenzene	<0.00415		0.00415	0.000535	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,3-Dichlorobenzene	<0.00415		0.00415	0.000427	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,3-Dichloropropane	<0.00415		0.00415	0.000498	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,4-Dichlorobenzene	<0.00415		0.00415	0.00116	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
1,4-Dioxane	<0.415	*	0.415	0.0400	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
2,2-Dichloropropane	<0.00415		0.00415	0.00141	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
2-Butanone (MEK)	<0.0415	*	0.0415	0.00304	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
2-Chlorotoluene	<0.00415		0.00415	0.000545	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
2-Hexanone	<0.0415		0.0415	0.00415	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
4-Chlorotoluene	<0.00415		0.00415	0.000980	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
4-Isopropyltoluene	<0.00415		0.00415	0.000666	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
4-Methyl-2-pentanone (MIBK)	<0.0415		0.0415	0.00272	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Acetone	<0.415		0.415	0.00699	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Benzene	<0.00415		0.00415	0.000407	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Bromobenzene	<0.00415		0.00415	0.00146	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-34-(0-0.25)

Lab Sample ID: 480-45969-23

Date Collected: 09/16/13 15:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.0

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	<0.00415		0.00415	0.00415	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Bromomethane	<0.00830		0.00830	0.000747	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Carbon disulfide	<0.00415		0.00415	0.00415	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Carbon tetrachloride	<0.00415		0.00415	0.000804	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Chlorobenzene	<0.00415		0.00415	0.00110	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Chlorobromomethane	<0.00415		0.00415	0.000600	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Chlorodibromomethane	<0.00415		0.00415	0.00106	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Chloroethane	<0.00830		0.00830	0.00188	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Chloroform	<0.00415		0.00415	0.000513	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Chloromethane	<0.00830		0.00830	0.000502	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
cis-1,2-Dichloroethene	<0.00415		0.00415	0.00106	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
cis-1,3-Dichloropropene	<0.00415		0.00415	0.00120	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Dichlorobromomethane	<0.00415		0.00415	0.00111	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Dichlorodifluoromethane	<0.00830		0.00830	0.000686	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Ethyl ether	<0.00415		0.00415	0.00349	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Ethylbenzene	<0.00415		0.00415	0.000573	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Ethylene Dibromide	<0.00415		0.00415	0.00107	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Hexachlorobutadiene	<0.00415		0.00415	0.000973	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Isopropyl ether	<0.00415		0.00415	0.00415	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Isopropylbenzene	<0.00415		0.00415	0.00125	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Methyl tert-butyl ether	<0.00415		0.00415	0.000816	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Methylene Chloride	<0.00415		0.00415	0.00382	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
m-Xylene & p-Xylene	<0.00830		0.00830	0.00140	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Naphthalene	<0.0415		0.0415	0.00111	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
n-Butylbenzene	<0.00415		0.00415	0.000723	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
N-Propylbenzene	<0.00415		0.00415	0.000664	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
o-Xylene	<0.00415		0.00415	0.00108	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
sec-Butylbenzene	<0.00415		0.00415	0.000723	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Styrene	<0.00415		0.00415	0.000415	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Tert-amyl methyl ether	<0.00415		0.00415	0.00213	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Tert-butyl ethyl ether	<0.00415		0.00415	0.00365	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
tert-Butylbenzene	<0.00415		0.00415	0.000864	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Tetrachloroethene	<0.00415		0.00415	0.00111	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Tetrahydrofuran	<0.0830		0.0830	0.00764	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Toluene	<0.00415		0.00415	0.000628	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
trans-1,2-Dichloroethene	<0.00415		0.00415	0.000857	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
trans-1,3-Dichloropropene	<0.00415		0.00415	0.00365	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Trichloroethene	<0.00415		0.00415	0.00183	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Trichlorofluoromethane	<0.00830		0.00830	0.000786	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Vinyl chloride	<0.00415		0.00415	0.00101	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1
Dibromomethane	<0.00415		0.00415	0.000855	mg/Kg	☼	09/19/13 09:47	09/19/13 15:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		70 - 130	09/19/13 09:47	09/19/13 15:46	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130	09/19/13 09:47	09/19/13 15:46	1
4-Bromofluorobenzene (Surr)	97		70 - 130	09/19/13 09:47	09/19/13 15:46	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.0979	J	1.47	0.0588	mg/Kg	☼		09/23/13 14:26	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-34-(0-0.25)

Lab Sample ID: 480-45969-23

Date Collected: 09/16/13 15:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.0

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C9-C12 Aliphatics (adjusted)	<1.47		1.47	0.0588	mg/Kg	☼		09/23/13 14:26	5

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.141	J	1.01	0.0405	mg/Kg	☼	09/18/13 08:33	09/19/13 14:22	5
C9-C10 Aromatics	0.609	J	1.01	0.0405	mg/Kg	☼	09/18/13 08:33	09/19/13 14:22	5
C9-C12 Aliphatics (unadjusted)	0.480	J	1.01	0.0405	mg/Kg	☼	09/18/13 08:33	09/19/13 14:22	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	78		70 - 130	09/18/13 08:33	09/19/13 14:22	5
2,5-Dibromotoluene (pid)	82		70 - 130	09/18/13 08:33	09/19/13 14:22	5

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.574		0.574	0.0930	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Acenaphthylene	<0.574		0.574	0.103	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Anthracene	0.241	J	0.574	0.109	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Benzo[a]anthracene	1.62		0.574	0.0873	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Benzo[a]pyrene	2.31		0.574	0.0827	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Benzo[b]fluoranthene	3.74		0.574	0.0815	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Benzo[g,h,i]perylene	2.04	B	0.574	0.0976	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Benzo[k]fluoranthene	1.44		0.574	0.0838	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
2-Methylnaphthalene	0.157	J	0.574	0.113	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Chrysene	2.10		0.574	0.102	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Dibenz(a,h)anthracene	1.31	B	0.574	0.0804	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Fluoranthene	1.93		0.574	0.101	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Fluorene	0.165	J	0.574	0.115	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Indeno[1,2,3-cd]pyrene	2.17	B	0.574	0.0838	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Naphthalene	0.105	J	0.574	0.0965	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Phenanthrene	0.926	B	0.574	0.115	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
Pyrene	1.90		0.574	0.105	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
C11-C22 Aromatics (unadjusted)	109	B	5.74	2.30	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
C19-C36 Aliphatics	288		5.74	2.30	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1
C9-C18 Aliphatics	3.63	J	5.74	2.30	mg/Kg	☼	09/18/13 05:21	09/19/13 08:29	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	87.3		5.88	5.88	mg/Kg	☼		09/20/13 10:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	38	X	40 - 140	09/18/13 05:21	09/19/13 08:29	1
2-Bromonaphthalene	96		40 - 140	09/18/13 05:21	09/19/13 08:29	1
2-Fluorobiphenyl	110		40 - 140	09/18/13 05:21	09/19/13 08:29	1
o-Terphenyl	42		40 - 140	09/18/13 05:21	09/19/13 08:29	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.4		1.13	0.452	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1
Barium	114		0.565	0.124	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1
Cadmium	4.36		0.226	0.0339	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1
Chromium	111		0.565	0.226	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1
Silver	1.47		0.565	0.226	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-34-(0-0.25)

Lab Sample ID: 480-45969-23

Date Collected: 09/16/13 15:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.0

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1040	^	0.565	0.271	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1
Selenium	1.67	B	0.565	0.452	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1
Antimony	2.83	^	0.565	0.452	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1
Beryllium	0.524		0.226	0.0316	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1
Thallium	<1.13		1.13	0.339	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1
Nickel	113		1.13	0.260	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1
Vanadium	45.8		0.565	0.124	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1
Zinc	1120	B	2.82	0.173	mg/Kg	☼	09/18/13 10:50	09/19/13 00:01	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.09	J	2.17	0.175	mg/Kg	☼	09/18/13 08:00	09/18/13 12:36	20

Client Sample ID: WCSS-35-(0-0.25)

Lab Sample ID: 480-45969-24

Date Collected: 09/16/13 15:50

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.6

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.113		0.113	0.0227	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,1,1-Trichloroethane	<0.113		0.113	0.0165	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,1,2,2-Tetrachloroethane	<0.113		0.113	0.0368	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,1,2-Trichloroethane	<0.113		0.113	0.0295	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,1-Dichloroethane	<0.113		0.113	0.0277	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,1-Dichloroethene	<0.113		0.113	0.0277	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,1-Dichloropropene	<0.113		0.113	0.0322	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,2,3-Trichlorobenzene	<0.113		0.113	0.0241	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,2,3-Trichloropropane	<0.113		0.113	0.0231	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,2,4-Trichlorobenzene	<0.113		0.113	0.0138	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,2,4-Trimethylbenzene	<0.113		0.113	0.0435	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,2-Dibromo-3-Chloropropane	<1.13		1.13	0.113	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,2-Dichlorobenzene	<0.113		0.113	0.0177	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,2-Dichloroethane	<0.113		0.113	0.0114	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,2-Dichloropropane	<0.113		0.113	0.113	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,3,5-Trimethylbenzene	<0.113		0.113	0.0146	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,3-Dichlorobenzene	<0.113		0.113	0.0116	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,3-Dichloropropane	<0.113		0.113	0.0136	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,4-Dichlorobenzene	0.0664	J	0.113	0.0317	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
1,4-Dioxane	<11.3		11.3	1.09	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
2,2-Dichloropropane	<0.113		0.113	0.0385	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
2-Butanone (MEK)	0.197	J *	1.13	0.0830	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
2-Chlorotoluene	<0.113		0.113	0.0149	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
2-Hexanone	<1.13		1.13	0.113	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
4-Chlorotoluene	<0.113		0.113	0.0267	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
4-Isopropyltoluene	0.236		0.113	0.0182	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
4-Methyl-2-pentanone (MIBK)	<1.13		1.13	0.0743	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Acetone	0.745	J	11.3	0.191	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Benzene	0.0453	J	0.113	0.0111	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Bromobenzene	<0.113		0.113	0.0399	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Bromoform	<0.113		0.113	0.113	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-35-(0-0.25)

Lab Sample ID: 480-45969-24

Date Collected: 09/16/13 15:50

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.6

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	<0.227		0.227	0.0204	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Carbon disulfide	<0.113		0.113	0.113	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Carbon tetrachloride	<0.113		0.113	0.0219	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Chlorobenzene	<0.113		0.113	0.0299	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Chlorobromomethane	<0.113		0.113	0.0164	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Chlorodibromomethane	<0.113		0.113	0.0290	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Chloroethane	<0.227		0.227	0.0512	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Chloroform	<0.113		0.113	0.0140	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Chloromethane	<0.227		0.227	0.0137	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
cis-1,2-Dichloroethene	<0.113		0.113	0.0290	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
cis-1,3-Dichloropropene	<0.113		0.113	0.0326	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Dichlorobromomethane	<0.113		0.113	0.0304	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Dichlorodifluoromethane	<0.227		0.227	0.0187	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Ethyl ether	<0.113		0.113	0.0952	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Ethylbenzene	0.0986	J	0.113	0.0156	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Ethylene Dibromide	<0.113		0.113	0.0291	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Hexachlorobutadiene	<0.113		0.113	0.0266	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Isopropyl ether	<0.113		0.113	0.113	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Isopropylbenzene	0.0596	J	0.113	0.0342	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Methyl tert-butyl ether	<0.113		0.113	0.0223	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Methylene Chloride	<0.113		0.113	0.104	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
m-Xylene & p-Xylene	0.0989	J	0.227	0.0381	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Naphthalene	<1.13		1.13	0.0304	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
n-Butylbenzene	<0.113		0.113	0.0197	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
N-Propylbenzene	0.0342	J	0.113	0.0181	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
o-Xylene	<0.113		0.113	0.0296	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
sec-Butylbenzene	<0.113		0.113	0.0197	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Styrene	1.87		0.113	0.0113	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Tert-amyl methyl ether	<0.113		0.113	0.0580	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Tert-butyl ethyl ether	<0.113		0.113	0.0997	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
tert-Butylbenzene	<0.113		0.113	0.0236	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Tetrachloroethene	0.0594	J	0.113	0.0304	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Tetrahydrofuran	<2.27		2.27	0.209	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Toluene	0.0785	J	0.113	0.0171	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
trans-1,2-Dichloroethene	<0.113		0.113	0.0234	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
trans-1,3-Dichloropropene	<0.113		0.113	0.0997	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Trichloroethene	<0.113		0.113	0.0499	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Trichlorofluoromethane	0.0900	J	0.227	0.0214	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Vinyl chloride	<0.113		0.113	0.0277	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1
Dibromomethane	<0.113		0.113	0.0233	mg/Kg	☼	09/18/13 14:57	09/20/13 02:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	96		70 - 130	09/18/13 14:57	09/20/13 02:59	1
1,2-Dichloroethane-d4 (Surr)	114		70 - 130	09/18/13 14:57	09/20/13 02:59	1
4-Bromofluorobenzene (Surr)	104		70 - 130	09/18/13 14:57	09/20/13 02:59	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.0636	J	0.270	0.0108	mg/Kg	☼		09/23/13 14:26	1
C9-C12 Aliphatics (adjusted)	<0.270		0.270	0.0108	mg/Kg	☼		09/23/13 14:26	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-35-(0-0.25)

Lab Sample ID: 480-45969-24

Date Collected: 09/16/13 15:50

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.6

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.177	J	0.247	0.00988	mg/Kg	☼	09/18/13 08:33	09/21/13 12:46	1
C9-C10 Aromatics	0.334		0.247	0.00988	mg/Kg	☼	09/18/13 08:33	09/21/13 12:46	1
C9-C12 Aliphatics (unadjusted)	0.722		0.247	0.00988	mg/Kg	☼	09/18/13 08:33	09/21/13 12:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	102		70 - 130				09/18/13 08:33	09/21/13 12:46	1
2,5-Dibromotoluene (pid)	99		70 - 130				09/18/13 08:33	09/21/13 12:46	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.519		0.519	0.0841	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Acenaphthylene	<0.519		0.519	0.0935	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Anthracene	0.686		0.519	0.0987	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Benzo[a]anthracene	2.88		0.519	0.0789	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Benzo[a]pyrene	2.55		0.519	0.0748	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Benzo[b]fluoranthene	4.02		0.519	0.0738	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Benzo[g,h,i]perylene	1.64	B	0.519	0.0883	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Benzo[k]fluoranthene	1.93		0.519	0.0758	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
2-Methylnaphthalene	0.126	J	0.519	0.102	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Chrysene	4.23		0.519	0.0925	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Dibenz(a,h)anthracene	1.01	B	0.519	0.0727	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Fluoranthene	2.69		0.519	0.0914	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Fluorene	0.135	J	0.519	0.104	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Indeno[1,2,3-cd]pyrene	1.75	B	0.519	0.0758	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Naphthalene	<0.519		0.519	0.0873	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Phenanthrene	0.979	B	0.519	0.104	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Pyrene	4.12		0.519	0.0945	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
C11-C22 Aromatics (unadjusted)	108	B	5.19	2.08	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
C19-C36 Aliphatics	64.6		5.19	2.08	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
C9-C18 Aliphatics	2.55	J	5.19	2.08	mg/Kg	☼	09/18/13 05:21	09/19/13 08:58	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	78.9		5.40	5.40	mg/Kg	☼		09/20/13 10:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	49		40 - 140				09/18/13 05:21	09/19/13 08:58	1
2-Bromonaphthalene	96		40 - 140				09/18/13 05:21	09/19/13 08:58	1
2-Fluorobiphenyl	109		40 - 140				09/18/13 05:21	09/19/13 08:58	1
o-Terphenyl	59		40 - 140				09/18/13 05:21	09/19/13 08:58	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.04		1.14	0.456	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1
Barium	58.5		0.570	0.125	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1
Cadmium	1.33		0.228	0.0342	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1
Chromium	25.7		0.570	0.228	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1
Silver	0.469	J	0.570	0.228	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1
Lead	247	^	0.570	0.274	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1
Selenium	0.487	J B	0.570	0.456	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1
Antimony	2.17	^	0.570	0.456	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1
Beryllium	0.231		0.228	0.0319	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-35-(0-0.25)

Lab Sample ID: 480-45969-24

Date Collected: 09/16/13 15:50

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.6

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<1.14		1.14	0.342	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1
Nickel	32.2		1.14	0.262	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1
Vanadium	15.5		0.570	0.125	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1
Zinc	333	B	2.85	0.174	mg/Kg	☼	09/18/13 10:50	09/19/13 00:04	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.408		0.0998	0.00808	mg/Kg	☼	09/18/13 08:00	09/18/13 14:40	1

Client Sample ID: WCSS-36-(0-0.25)

Lab Sample ID: 480-45969-25

Date Collected: 09/16/13 15:05

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.4

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13.8		1.06	0.423	mg/Kg	☼	09/18/13 10:50	09/19/13 00:06	1
Barium	246		0.529	0.116	mg/Kg	☼	09/18/13 10:50	09/19/13 00:06	1
Cadmium	16.1		0.212	0.0318	mg/Kg	☼	09/18/13 10:50	09/19/13 00:06	1
Chromium	229		0.529	0.212	mg/Kg	☼	09/18/13 10:50	09/19/13 00:06	1
Silver	2.78		2.65	1.06	mg/Kg	☼	09/18/13 10:50	09/19/13 15:19	5
Lead	1690		2.65	1.27	mg/Kg	☼	09/18/13 10:50	09/19/13 15:19	5
Selenium	4.14	B	0.529	0.423	mg/Kg	☼	09/18/13 10:50	09/19/13 00:06	1
Antimony	4.35	^	0.529	0.423	mg/Kg	☼	09/18/13 10:50	09/19/13 00:06	1
Beryllium	0.347		0.212	0.0296	mg/Kg	☼	09/18/13 10:50	09/19/13 00:06	1
Thallium	0.564	J	1.06	0.318	mg/Kg	☼	09/18/13 10:50	09/19/13 00:06	1
Nickel	328		5.29	1.22	mg/Kg	☼	09/18/13 10:50	09/19/13 15:19	5
Vanadium	179		2.65	0.582	mg/Kg	☼	09/18/13 10:50	09/19/13 15:19	5
Zinc	1570	B	2.65	0.162	mg/Kg	☼	09/18/13 10:50	09/19/13 00:06	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.59	J	2.08	0.168	mg/Kg	☼	09/18/13 08:00	09/18/13 12:40	20

Client Sample ID: WCSS-38-(0-0.25)

Lab Sample ID: 480-45969-26

Date Collected: 09/16/13 09:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 98.4

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.52		0.892	0.357	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1
Barium	21.2		0.446	0.0981	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1
Cadmium	0.0785	J	0.178	0.0268	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1
Chromium	7.33		0.446	0.178	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1
Silver	<0.446		0.446	0.178	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1
Lead	33.9	^	0.446	0.214	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1
Selenium	0.580	B	0.446	0.357	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1
Antimony	<0.446	^	0.446	0.357	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1
Beryllium	0.307		0.178	0.0250	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1
Thallium	<0.892		0.892	0.268	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1
Nickel	17.3		0.892	0.205	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-38-(0-0.25)

Lab Sample ID: 480-45969-26

Date Collected: 09/16/13 09:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 98.4

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	31.7		0.446	0.0981	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1
Zinc	70.1	B	2.23	0.137	mg/Kg	☼	09/18/13 10:50	09/19/13 00:08	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0300	J	0.0939	0.00761	mg/Kg	☼	09/18/13 08:00	09/18/13 14:46	1

Client Sample ID: WCSS-39-(0-0.25)

Lab Sample ID: 480-45969-27

Date Collected: 09/16/13 08:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.4

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.10		1.15	0.461	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1
Barium	43.6		0.576	0.127	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1
Cadmium	0.149	J	0.230	0.0346	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1
Chromium	12.9		0.576	0.230	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1
Silver	<0.576		0.576	0.230	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1
Lead	48.7	^	0.576	0.277	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1
Selenium	0.706	B	0.576	0.461	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1
Antimony	<0.576	^	0.576	0.461	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1
Beryllium	0.278		0.230	0.0323	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1
Thallium	<1.15		1.15	0.346	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1
Nickel	16.0		1.15	0.265	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1
Vanadium	35.1		0.576	0.127	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1
Zinc	73.8	B	2.88	0.176	mg/Kg	☼	09/18/13 10:50	09/19/13 00:10	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0688	J	0.0973	0.00788	mg/Kg	☼	09/18/13 08:00	09/18/13 14:47	1

Client Sample ID: WCSS-40-(0-0.25)

Lab Sample ID: 480-45969-28

Date Collected: 09/16/13 08:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 96.4

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00249		0.00249	0.000499	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,1,1-Trichloroethane	<0.00249		0.00249	0.000362	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,1,2,2-Tetrachloroethane	<0.00249		0.00249	0.000809	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,1,2-Trichloroethane	<0.00249		0.00249	0.000648	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,1-Dichloroethane	<0.00249		0.00249	0.000609	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,1-Dichloroethene	<0.00249		0.00249	0.000611	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,1-Dichloropropene	<0.00249		0.00249	0.000708	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,2,3-Trichlorobenzene	<0.00249		0.00249	0.000530	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,2,3-Trichloropropane	<0.00249		0.00249	0.000508	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,2,4-Trichlorobenzene	<0.00249		0.00249	0.000303	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,2,4-Trimethylbenzene	<0.00249		0.00249	0.000958	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,2-Dibromo-3-Chloropropane	<0.0249		0.0249	0.00249	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,2-Dichlorobenzene	<0.00249		0.00249	0.000390	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-40-(0-0.25)

Lab Sample ID: 480-45969-28

Date Collected: 09/16/13 08:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 96.4

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	<0.00249		0.00249	0.000250	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,2-Dichloropropane	<0.00249		0.00249	0.00249	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,3,5-Trimethylbenzene	<0.00249		0.00249	0.000321	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,3-Dichlorobenzene	<0.00249		0.00249	0.000256	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,3-Dichloropropane	<0.00249		0.00249	0.000299	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,4-Dichlorobenzene	<0.00249		0.00249	0.000698	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
1,4-Dioxane	<0.249	*	0.249	0.0240	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
2,2-Dichloropropane	<0.00249		0.00249	0.000848	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
2-Butanone (MEK)	<0.0249	*	0.0249	0.00183	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
2-Chlorotoluene	<0.00249		0.00249	0.000327	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
2-Hexanone	<0.0249		0.0249	0.00249	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
4-Chlorotoluene	<0.00249		0.00249	0.000589	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
4-Isopropyltoluene	<0.00249		0.00249	0.000400	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
4-Methyl-2-pentanone (MIBK)	<0.0249		0.0249	0.00164	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Acetone	<0.249		0.249	0.00420	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Benzene	<0.00249		0.00249	0.000244	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Bromobenzene	<0.00249		0.00249	0.000878	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Bromoform	<0.00249		0.00249	0.00249	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Bromomethane	<0.00499		0.00499	0.000449	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Carbon disulfide	<0.00249		0.00249	0.00249	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Carbon tetrachloride	<0.00249		0.00249	0.000483	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Chlorobenzene	<0.00249		0.00249	0.000658	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Chlorobromomethane	<0.00249		0.00249	0.000360	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Chlorodibromomethane	<0.00249		0.00249	0.000638	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Chloroethane	<0.00499		0.00499	0.00113	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Chloroform	<0.00249		0.00249	0.000308	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Chloromethane	<0.00499		0.00499	0.000301	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
cis-1,2-Dichloroethene	<0.00249		0.00249	0.000638	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
cis-1,3-Dichloropropene	<0.00249		0.00249	0.000718	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Dichlorobromomethane	<0.00249		0.00249	0.000668	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Dichlorodifluoromethane	<0.00499		0.00499	0.000412	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Ethyl ether	<0.00249		0.00249	0.00209	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Ethylbenzene	<0.00249		0.00249	0.000344	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Ethylene Dibromide	<0.00249		0.00249	0.000640	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Hexachlorobutadiene	<0.00249		0.00249	0.000585	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Isopropyl ether	<0.00249		0.00249	0.00249	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Isopropylbenzene	<0.00249		0.00249	0.000752	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Methyl tert-butyl ether	<0.00249		0.00249	0.000490	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Methylene Chloride	<0.00249		0.00249	0.00229	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
m-Xylene & p-Xylene	<0.00499		0.00499	0.000838	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Naphthalene	<0.0249		0.0249	0.000668	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
n-Butylbenzene	<0.00249		0.00249	0.000434	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
N-Propylbenzene	<0.00249		0.00249	0.000399	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
o-Xylene	<0.00249		0.00249	0.000651	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
sec-Butylbenzene	<0.00249		0.00249	0.000434	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Styrene	<0.00249		0.00249	0.000249	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Tert-amyl methyl ether	<0.00249		0.00249	0.00128	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Tert-butyl ethyl ether	<0.00249		0.00249	0.00219	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
tert-Butylbenzene	<0.00249		0.00249	0.000519	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-40-(0-0.25)

Lab Sample ID: 480-45969-28

Date Collected: 09/16/13 08:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 96.4

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	<0.00249		0.00249	0.000669	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Tetrahydrofuran	<0.0499		0.0499	0.00459	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Toluene	<0.00249		0.00249	0.000377	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
trans-1,2-Dichloroethene	<0.00249		0.00249	0.000515	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
trans-1,3-Dichloropropene	<0.00249		0.00249	0.00219	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Trichloroethene	<0.00249		0.00249	0.00110	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Trichlorofluoromethane	<0.00499		0.00499	0.000472	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Vinyl chloride	<0.00249		0.00249	0.000609	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1
Dibromomethane	<0.00249		0.00249	0.000514	mg/Kg	☼	09/19/13 09:47	09/19/13 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130	09/19/13 09:47	09/19/13 16:11	1
1,2-Dichloroethane-d4 (Surr)	103		70 - 130	09/19/13 09:47	09/19/13 16:11	1
4-Bromofluorobenzene (Surr)	98		70 - 130	09/19/13 09:47	09/19/13 16:11	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.0434	J	0.259	0.0104	mg/Kg	☼		09/23/13 14:26	1
C9-C12 Aliphatics (adjusted)	0.0707	J	0.259	0.0104	mg/Kg	☼		09/23/13 14:26	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.184		0.166	0.00662	mg/Kg	☼	09/18/13 09:34	09/21/13 13:24	1
C9-C10 Aromatics	0.338		0.166	0.00662	mg/Kg	☼	09/18/13 09:34	09/21/13 13:24	1
C9-C12 Aliphatics (unadjusted)	0.526		0.166	0.00662	mg/Kg	☼	09/18/13 09:34	09/21/13 13:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	115		70 - 130	09/18/13 09:34	09/21/13 13:24	1
2,5-Dibromotoluene (pid)	93		70 - 130	09/18/13 09:34	09/21/13 13:24	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.488		0.488	0.0791	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Acenaphthylene	<0.488		0.488	0.0878	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Anthracene	0.205	J	0.488	0.0927	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Benzo[a]anthracene	1.41		0.488	0.0742	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Benzo[a]pyrene	1.74		0.488	0.0703	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Benzo[b]fluoranthene	2.11		0.488	0.0693	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Benzo[g,h,i]perylene	1.34	B	0.488	0.0830	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Benzo[k]fluoranthene	1.08		0.488	0.0712	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
2-Methylnaphthalene	<0.488		0.488	0.0956	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Chrysene	1.60		0.488	0.0869	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Dibenz(a,h)anthracene	0.793	B	0.488	0.0683	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Fluoranthene	1.55		0.488	0.0859	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Fluorene	0.196	J	0.488	0.0976	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Indeno[1,2,3-cd]pyrene	1.34	B	0.488	0.0712	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Naphthalene	<0.488		0.488	0.0820	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Phenanthrene	0.655	B	0.488	0.0976	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Pyrene	1.78		0.488	0.0888	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
C11-C22 Aromatics (unadjusted)	82.1	B	4.88	1.95	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
C19-C36 Aliphatics	148		4.88	1.95	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-40-(0-0.25)

Lab Sample ID: 480-45969-28

Date Collected: 09/16/13 08:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 96.4

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C9-C18 Aliphatics	13.5		4.88	1.95	mg/Kg	☼	09/18/13 05:21	09/19/13 09:28	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	66.3		5.19	5.19	mg/Kg	☼		09/20/13 10:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	31	X	40 - 140				09/18/13 05:21	09/19/13 09:28	1
2-Bromonaphthalene	90		40 - 140				09/18/13 05:21	09/19/13 09:28	1
2-Fluorobiphenyl	104		40 - 140				09/18/13 05:21	09/19/13 09:28	1
o-Terphenyl	39	X	40 - 140				09/18/13 05:21	09/19/13 09:28	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.33		1.04	0.415	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1
Barium	83.1		0.519	0.114	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1
Cadmium	2.30		0.208	0.0312	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1
Chromium	38.5		0.519	0.208	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1
Silver	1.49		0.519	0.208	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1
Lead	616	^	0.519	0.249	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1
Selenium	1.08	B	0.519	0.415	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1
Antimony	<0.519	^	0.519	0.415	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1
Beryllium	0.344		0.208	0.0291	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1
Thallium	<1.04		1.04	0.312	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1
Nickel	51.8		1.04	0.239	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1
Vanadium	25.4		0.519	0.114	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1
Zinc	562	B	2.60	0.159	mg/Kg	☼	09/18/13 10:50	09/19/13 00:12	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.893	^	0.499	0.0404	mg/Kg	☼	09/18/13 08:00	09/18/13 15:17	5

Client Sample ID: WCSS-41-(0-0.25)

Lab Sample ID: 480-45969-29

Date Collected: 09/16/13 09:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 90.3

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11.1		1.14	0.457	mg/Kg	☼	09/18/13 10:50	09/19/13 00:15	1
Barium	736		0.571	0.126	mg/Kg	☼	09/18/13 10:50	09/19/13 00:15	1
Cadmium	13.5		0.229	0.0343	mg/Kg	☼	09/18/13 10:50	09/19/13 00:15	1
Chromium	122		0.571	0.229	mg/Kg	☼	09/18/13 10:50	09/19/13 00:15	1
Silver	5.75		0.571	0.229	mg/Kg	☼	09/18/13 10:50	09/19/13 00:15	1
Lead	2520	^	0.571	0.274	mg/Kg	☼	09/18/13 10:50	09/19/13 00:15	1
Selenium	3.05	B	0.571	0.457	mg/Kg	☼	09/18/13 10:50	09/19/13 00:15	1
Antimony	14.9	^	0.571	0.457	mg/Kg	☼	09/18/13 10:50	09/19/13 00:15	1
Beryllium	0.481		0.229	0.0320	mg/Kg	☼	09/18/13 10:50	09/19/13 00:15	1
Thallium	<1.14		1.14	0.343	mg/Kg	☼	09/18/13 10:50	09/19/13 00:15	1
Nickel	166		1.14	0.263	mg/Kg	☼	09/18/13 10:50	09/19/13 00:15	1
Vanadium	64.7		0.571	0.126	mg/Kg	☼	09/18/13 10:50	09/19/13 00:15	1
Zinc	3290	B	5.71	0.350	mg/Kg	☼	09/18/13 10:50	09/19/13 15:21	2

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-41-(0-0.25)

Lab Sample ID: 480-45969-29

Date Collected: 09/16/13 09:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 90.3

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.79		2.12	0.172	mg/Kg	☼	09/18/13 08:00	09/18/13 12:48	20

Client Sample ID: WCSS-43-(0-0.25)

Lab Sample ID: 480-45969-30

Date Collected: 09/16/13 09:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 98.8

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.74		1.08	0.431	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1
Barium	233		0.538	0.118	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1
Cadmium	7.88		0.215	0.0323	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1
Chromium	38.5		0.538	0.215	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1
Silver	0.709		0.538	0.215	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1
Lead	1440	^	0.538	0.258	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1
Selenium	1.54	B	0.538	0.431	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1
Antimony	16.6	^	0.538	0.431	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1
Beryllium	0.350		0.215	0.0301	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1
Thallium	<1.08		1.08	0.323	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1
Nickel	47.1		1.08	0.248	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1
Vanadium	22.0		0.538	0.118	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1
Zinc	989	B	2.69	0.165	mg/Kg	☼	09/18/13 10:50	09/19/13 00:22	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	9.00		2.05	0.166	mg/Kg	☼	09/18/13 08:00	09/18/13 12:50	20

Client Sample ID: WCSS-44-(0-0.25)

Lab Sample ID: 480-45969-31

Date Collected: 09/16/13 15:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 99.4

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00329		0.00329	0.000658	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,1,1-Trichloroethane	<0.00329		0.00329	0.000478	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,1,2,2-Tetrachloroethane	<0.00329		0.00329	0.00107	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,1,2-Trichloroethane	<0.00329		0.00329	0.000856	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,1-Dichloroethane	<0.00329		0.00329	0.000803	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,1-Dichloroethene	<0.00329		0.00329	0.000806	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,1-Dichloropropene	<0.00329		0.00329	0.000935	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,2,3-Trichlorobenzene	<0.00329		0.00329	0.000699	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,2,3-Trichloropropane	<0.00329		0.00329	0.000670	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,2,4-Trichlorobenzene	<0.00329		0.00329	0.000400	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,2,4-Trimethylbenzene	<0.00329		0.00329	0.00126	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,2-Dibromo-3-Chloropropane	<0.0329		0.0329	0.00329	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,2-Dichlorobenzene	<0.00329		0.00329	0.000515	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,2-Dichloroethane	<0.00329		0.00329	0.000330	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,2-Dichloropropane	<0.00329		0.00329	0.00329	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,3,5-Trimethylbenzene	<0.00329		0.00329	0.000424	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,3-Dichlorobenzene	<0.00329		0.00329	0.000338	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,3-Dichloropropane	<0.00329		0.00329	0.000395	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-44-(0-0.25)

Lab Sample ID: 480-45969-31

Date Collected: 09/16/13 15:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 99.4

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.00329		0.00329	0.000922	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
1,4-Dioxane	<0.329	*	0.329	0.0317	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
2,2-Dichloropropane	<0.00329		0.00329	0.00112	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
2-Butanone (MEK)	<0.0329	*	0.0329	0.00241	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
2-Chlorotoluene	<0.00329		0.00329	0.000432	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
2-Hexanone	<0.0329		0.0329	0.00329	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
4-Chlorotoluene	<0.00329		0.00329	0.000777	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
4-Isopropyltoluene	<0.00329		0.00329	0.000528	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
4-Methyl-2-pentanone (MIBK)	<0.0329		0.0329	0.00216	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Acetone	<0.329		0.329	0.00554	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Benzene	<0.00329		0.00329	0.000323	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Bromobenzene	<0.00329		0.00329	0.00116	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Bromoform	<0.00329		0.00329	0.00329	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Bromomethane	<0.00658		0.00658	0.000592	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Carbon disulfide	<0.00329		0.00329	0.00329	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Carbon tetrachloride	<0.00329		0.00329	0.000637	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Chlorobenzene	<0.00329		0.00329	0.000869	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Chlorobromomethane	<0.00329		0.00329	0.000475	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Chlorodibromomethane	<0.00329		0.00329	0.000843	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Chloroethane	<0.00658		0.00658	0.00149	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Chloroform	<0.00329		0.00329	0.000407	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Chloromethane	<0.00658		0.00658	0.000398	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
cis-1,2-Dichloroethene	<0.00329		0.00329	0.000843	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
cis-1,3-Dichloropropene	<0.00329		0.00329	0.000948	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Dichlorobromomethane	<0.00329		0.00329	0.000882	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Dichlorodifluoromethane	<0.00658		0.00658	0.000544	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Ethyl ether	<0.00329		0.00329	0.00276	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Ethylbenzene	<0.00329		0.00329	0.000454	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Ethylene Dibromide	<0.00329		0.00329	0.000845	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Hexachlorobutadiene	<0.00329		0.00329	0.000771	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Isopropyl ether	<0.00329		0.00329	0.00329	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Isopropylbenzene	<0.00329		0.00329	0.000993	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Methyl tert-butyl ether	<0.00329		0.00329	0.000646	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Methylene Chloride	<0.00329		0.00329	0.00303	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
m-Xylene & p-Xylene	<0.00658		0.00658	0.00111	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Naphthalene	<0.0329		0.0329	0.000882	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
n-Butylbenzene	<0.00329		0.00329	0.000573	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
N-Propylbenzene	<0.00329		0.00329	0.000527	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
o-Xylene	<0.00329		0.00329	0.000860	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
sec-Butylbenzene	<0.00329		0.00329	0.000573	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Styrene	<0.00329		0.00329	0.000329	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Tert-amyl methyl ether	<0.00329		0.00329	0.00169	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Tert-butyl ethyl ether	<0.00329		0.00329	0.00290	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
tert-Butylbenzene	<0.00329		0.00329	0.000685	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Tetrachloroethene	0.00511		0.00329	0.000883	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Tetrahydrofuran	<0.0658		0.0658	0.00606	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Toluene	<0.00329		0.00329	0.000498	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
trans-1,2-Dichloroethene	<0.00329		0.00329	0.000679	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
trans-1,3-Dichloropropene	<0.00329		0.00329	0.00290	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-44-(0-0.25)

Lab Sample ID: 480-45969-31

Date Collected: 09/16/13 15:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 99.4

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	<0.00329		0.00329	0.00145	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Trichlorofluoromethane	<0.00658		0.00658	0.000623	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Vinyl chloride	<0.00329		0.00329	0.000803	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1
Dibromomethane	<0.00329		0.00329	0.000678	mg/Kg	☼	09/19/13 09:47	09/19/13 16:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130	09/19/13 09:47	09/19/13 16:36	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130	09/19/13 09:47	09/19/13 16:36	1
4-Bromofluorobenzene (Surr)	96		70 - 130	09/19/13 09:47	09/19/13 16:36	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	0.185	J	1.26	0.0503	mg/Kg	☼		09/23/13 14:26	5
C9-C12 Aliphatics (adjusted)	<1.26		1.26	0.0503	mg/Kg	☼		09/23/13 14:26	5

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	0.472	J	0.900	0.0360	mg/Kg	☼	09/18/13 09:34	09/19/13 15:29	5
C9-C10 Aromatics	0.588	J	0.900	0.0360	mg/Kg	☼	09/18/13 09:34	09/19/13 15:29	5
C9-C12 Aliphatics (unadjusted)	0.607	J	0.900	0.0360	mg/Kg	☼	09/18/13 09:34	09/19/13 15:29	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	76		70 - 130	09/18/13 09:34	09/19/13 15:29	5
2,5-Dibromotoluene (pid)	82		70 - 130	09/18/13 09:34	09/19/13 15:29	5

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0785	J	0.471	0.0763	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Acenaphthylene	<0.471		0.471	0.0848	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Anthracene	0.321	J	0.471	0.0895	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Benzo[a]anthracene	1.37		0.471	0.0716	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Benzo[a]pyrene	3.41		0.471	0.0678	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Benzo[b]fluoranthene	2.90		0.471	0.0669	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Benzo[g,h,i]perylene	2.02	B	0.471	0.0801	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Benzo[k]fluoranthene	1.55		0.471	0.0688	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
2-Methylnaphthalene	0.320	J	0.471	0.0923	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Chrysene	2.01		0.471	0.0838	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Dibenz(a,h)anthracene	1.26	B	0.471	0.0659	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Fluoranthene	2.05		0.471	0.0829	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Fluorene	0.284	J	0.471	0.0942	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Indeno[1,2,3-cd]pyrene	2.09	B	0.471	0.0688	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Naphthalene	0.309	J	0.471	0.0791	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Phenanthrene	0.896	B	0.471	0.0942	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
Pyrene	1.95		0.471	0.0857	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
C11-C22 Aromatics (unadjusted)	144	B	4.71	1.88	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
C19-C36 Aliphatics	441		4.71	1.88	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1
C9-C18 Aliphatics	36.5		4.71	1.88	mg/Kg	☼	09/18/13 05:21	09/19/13 09:57	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	121		5.03	5.03	mg/Kg	☼		09/20/13 10:00	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-44-(0-0.25)

Lab Sample ID: 480-45969-31

Date Collected: 09/16/13 15:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 99.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	46		40 - 140	09/18/13 05:21	09/19/13 09:57	1
2-Bromonaphthalene	95		40 - 140	09/18/13 05:21	09/19/13 09:57	1
2-Fluorobiphenyl	107		40 - 140	09/18/13 05:21	09/19/13 09:57	1
o-Terphenyl	55		40 - 140	09/18/13 05:21	09/19/13 09:57	1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12.2		0.944	0.378	mg/Kg	☼	09/18/13 10:50	09/19/13 00:24	1
Barium	376		0.472	0.104	mg/Kg	☼	09/18/13 10:50	09/19/13 00:24	1
Cadmium	11.2		0.189	0.0283	mg/Kg	☼	09/18/13 10:50	09/19/13 00:24	1
Chromium	257		0.472	0.189	mg/Kg	☼	09/18/13 10:50	09/19/13 00:24	1
Silver	2.50		2.36	0.944	mg/Kg	☼	09/18/13 10:50	09/19/13 15:24	5
Lead	2320		2.36	1.13	mg/Kg	☼	09/18/13 10:50	09/19/13 15:24	5
Selenium	4.70	B	0.472	0.378	mg/Kg	☼	09/18/13 10:50	09/19/13 00:24	1
Antimony	18.5	^	0.472	0.378	mg/Kg	☼	09/18/13 10:50	09/19/13 00:24	1
Beryllium	0.316		0.189	0.0264	mg/Kg	☼	09/18/13 10:50	09/19/13 00:24	1
Thallium	<0.944		0.944	0.283	mg/Kg	☼	09/18/13 10:50	09/19/13 00:24	1
Nickel	290		4.72	1.09	mg/Kg	☼	09/18/13 10:50	09/19/13 15:24	5
Vanadium	51.2		2.36	0.519	mg/Kg	☼	09/18/13 10:50	09/19/13 15:24	5
Zinc	3160	B	11.8	0.722	mg/Kg	☼	09/18/13 10:50	09/19/13 15:24	5

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	3.33		1.89	0.153	mg/Kg	☼	09/18/13 08:00	09/18/13 12:51	20

Client Sample ID: WCSS-45-(0-0.25)

Lab Sample ID: 480-45969-32

Date Collected: 09/16/13 09:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.4

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.3		1.20	0.481	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1
Barium	227		0.602	0.132	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1
Cadmium	14.0		0.241	0.0361	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1
Chromium	32.4		0.602	0.241	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1
Silver	0.547	J	0.602	0.241	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1
Lead	1030	^	0.602	0.289	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1
Selenium	2.74	B	0.602	0.481	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1
Antimony	6.32	^	0.602	0.481	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1
Beryllium	0.451		0.241	0.0337	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1
Thallium	<1.20		1.20	0.361	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1
Nickel	60.9		1.20	0.277	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1
Vanadium	23.8		0.602	0.132	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1
Zinc	1420	B	3.01	0.184	mg/Kg	☼	09/18/13 10:50	09/19/13 00:27	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.81		2.31	0.187	mg/Kg	☼	09/18/13 08:00	09/18/13 12:57	20

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-46-(0-0.25)

Lab Sample ID: 480-45969-33

Date Collected: 09/16/13 09:10

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 99.1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.59		1.11	0.444	mg/Kg	☼	09/18/13 10:50	09/19/13 00:29	1
Barium	134		0.555	0.122	mg/Kg	☼	09/18/13 10:50	09/19/13 00:29	1
Cadmium	11.1		0.222	0.0333	mg/Kg	☼	09/18/13 10:50	09/19/13 00:29	1
Chromium	13.9		0.555	0.222	mg/Kg	☼	09/18/13 10:50	09/19/13 00:29	1
Silver	0.273	J	0.555	0.222	mg/Kg	☼	09/18/13 10:50	09/19/13 00:29	1
Lead	412	^	0.555	0.267	mg/Kg	☼	09/18/13 10:50	09/19/13 00:29	1
Selenium	1.25	B	0.555	0.444	mg/Kg	☼	09/18/13 10:50	09/19/13 00:29	1
Antimony	0.824	^	0.555	0.444	mg/Kg	☼	09/18/13 10:50	09/19/13 00:29	1
Beryllium	0.286		0.222	0.0311	mg/Kg	☼	09/18/13 10:50	09/19/13 00:29	1
Thallium	<1.11		1.11	0.333	mg/Kg	☼	09/18/13 10:50	09/19/13 00:29	1
Nickel	32.9		1.11	0.255	mg/Kg	☼	09/18/13 10:50	09/19/13 00:29	1
Vanadium	17.8		0.555	0.122	mg/Kg	☼	09/18/13 10:50	09/19/13 00:29	1
Zinc	2440	B	5.55	0.340	mg/Kg	☼	09/18/13 10:50	09/19/13 15:26	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	4.06		1.94	0.157	mg/Kg	☼	09/18/13 08:00	09/18/13 12:58	20

Client Sample ID: WCSS-47-(0-0.25)

Lab Sample ID: 480-45969-34

Date Collected: 09/16/13 07:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 99.1

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.10		1.05	0.422	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1
Barium	13.6		0.527	0.116	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1
Cadmium	0.209	J	0.211	0.0316	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1
Chromium	8.76		0.527	0.211	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1
Silver	<0.527		0.527	0.211	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1
Lead	61.4	^	0.527	0.253	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1
Selenium	0.444	J B	0.527	0.422	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1
Antimony	2.66	^	0.527	0.422	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1
Beryllium	0.146	J	0.211	0.0295	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1
Thallium	<1.05		1.05	0.316	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1
Nickel	6.08		1.05	0.243	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1
Vanadium	11.5		0.527	0.116	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1
Zinc	47.7	B	2.64	0.161	mg/Kg	☼	09/18/13 10:50	09/19/13 00:31	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.106		0.0963	0.00780	mg/Kg	☼	09/18/13 08:00	09/18/13 14:51	1

Client Sample ID: WCSS-48-(0-0.25)

Lab Sample ID: 480-45969-35

Date Collected: 09/16/13 07:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 97.0

Method: 6010 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	2.17		0.984	0.393	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1
Barium	23.7		0.492	0.108	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-48-(0-0.25)

Lab Sample ID: 480-45969-35

Date Collected: 09/16/13 07:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 97.0

Method: 6010 - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.181	J	0.197	0.0295	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1
Chromium	10.2		0.492	0.197	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1
Silver	<0.492		0.492	0.197	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1
Lead	33.5	^	0.492	0.236	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1
Selenium	0.787	B	0.492	0.393	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1
Antimony	<0.492	^	0.492	0.393	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1
Beryllium	0.422		0.197	0.0275	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1
Thallium	<0.984		0.984	0.295	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1
Nickel	32.6		0.984	0.226	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1
Vanadium	16.4		0.492	0.108	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1
Zinc	45.1	B	2.46	0.150	mg/Kg	☼	09/18/13 10:50	09/19/13 00:42	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0470	J	0.101	0.00819	mg/Kg	☼	09/18/13 08:00	09/18/13 15:05	1

Client Sample ID: TB-09162013

Lab Sample ID: 480-45969-38

Date Collected: 09/16/13 12:00

Matrix: Water

Date Received: 09/18/13 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			09/19/13 02:13	1
1,1,1-Trichloroethane	<1.00		1.00	0.820	ug/L			09/19/13 02:13	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.210	ug/L			09/19/13 02:13	1
1,1,2-Trichloroethane	<1.00		1.00	0.230	ug/L			09/19/13 02:13	1
1,1-Dichloroethane	<1.00		1.00	0.380	ug/L			09/19/13 02:13	1
1,1-Dichloroethene	<1.00		1.00	0.290	ug/L			09/19/13 02:13	1
1,1-Dichloropropene	<1.00		1.00	0.720	ug/L			09/19/13 02:13	1
1,2,3-Trichlorobenzene	<1.00		1.00	0.410	ug/L			09/19/13 02:13	1
1,2,3-Trichloropropane	<1.00		1.00	0.890	ug/L			09/19/13 02:13	1
1,2,4-Trichlorobenzene	<1.00		1.00	0.410	ug/L			09/19/13 02:13	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.750	ug/L			09/19/13 02:13	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.390	ug/L			09/19/13 02:13	1
1,2-Dichlorobenzene	<1.00		1.00	0.790	ug/L			09/19/13 02:13	1
1,2-Dichloroethane	<1.00		1.00	0.210	ug/L			09/19/13 02:13	1
1,2-Dichloropropane	<1.00		1.00	0.720	ug/L			09/19/13 02:13	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.770	ug/L			09/19/13 02:13	1
1,3-Dichlorobenzene	<1.00		1.00	0.780	ug/L			09/19/13 02:13	1
1,3-Dichloropropane	<1.00		1.00	0.750	ug/L			09/19/13 02:13	1
1,4-Dichlorobenzene	<1.00		1.00	0.840	ug/L			09/19/13 02:13	1
1,4-Dioxane	<50.0		50.0	9.32	ug/L			09/19/13 02:13	1
2,2-Dichloropropane	<1.00		1.00	0.400	ug/L			09/19/13 02:13	1
2-Butanone (MEK)	<10.0	*	10.0	1.32	ug/L			09/19/13 02:13	1
2-Chlorotoluene	<1.00		1.00	0.860	ug/L			09/19/13 02:13	1
2-Hexanone	<10.0		10.0	1.24	ug/L			09/19/13 02:13	1
4-Chlorotoluene	<1.00		1.00	0.840	ug/L			09/19/13 02:13	1
4-Isopropyltoluene	<1.00		1.00	0.310	ug/L			09/19/13 02:13	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			09/19/13 02:13	1
Acetone	12.5	J	50.0	3.00	ug/L			09/19/13 02:13	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: TB-09162013

Lab Sample ID: 480-45969-38

Date Collected: 09/16/13 12:00

Matrix: Water

Date Received: 09/18/13 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<1.00		1.00	0.410	ug/L			09/19/13 02:13	1
Bromobenzene	<1.00		1.00	0.800	ug/L			09/19/13 02:13	1
Bromoform	<1.00		1.00	0.260	ug/L			09/19/13 02:13	1
Bromomethane	<2.00		2.00	0.690	ug/L			09/19/13 02:13	1
Carbon disulfide	<10.0		10.0	0.190	ug/L			09/19/13 02:13	1
Carbon tetrachloride	<1.00		1.00	0.270	ug/L			09/19/13 02:13	1
Chlorobenzene	<1.00		1.00	0.750	ug/L			09/19/13 02:13	1
Chlorobromomethane	<1.00		1.00	0.870	ug/L			09/19/13 02:13	1
Chlorodibromomethane	<0.500		0.500	0.320	ug/L			09/19/13 02:13	1
Chloroethane	<2.00		2.00	0.320	ug/L			09/19/13 02:13	1
Chloroform	<1.00		1.00	0.340	ug/L			09/19/13 02:13	1
Chloromethane	<2.00		2.00	0.350	ug/L			09/19/13 02:13	1
cis-1,2-Dichloroethene	<1.00		1.00	0.810	ug/L			09/19/13 02:13	1
cis-1,3-Dichloropropene	<0.400		0.400	0.360	ug/L			09/19/13 02:13	1
Dichlorobromomethane	<0.500		0.500	0.390	ug/L			09/19/13 02:13	1
Dichlorodifluoromethane	<1.00		1.00	0.680	ug/L			09/19/13 02:13	1
Ethyl ether	<1.00		1.00	0.720	ug/L			09/19/13 02:13	1
Ethylbenzene	<1.00		1.00	0.740	ug/L			09/19/13 02:13	1
Ethylene Dibromide	<1.00		1.00	0.730	ug/L			09/19/13 02:13	1
Hexachlorobutadiene	<0.400		0.400	0.280	ug/L			09/19/13 02:13	1
Isopropyl ether	<10.0		10.0	0.590	ug/L			09/19/13 02:13	1
Isopropylbenzene	<1.00		1.00	0.790	ug/L			09/19/13 02:13	1
Methyl tert-butyl ether	<1.00		1.00	0.160	ug/L			09/19/13 02:13	1
Methylene Chloride	0.507	J	1.00	0.440	ug/L			09/19/13 02:13	1
m-Xylene & p-Xylene	<2.00		2.00	0.660	ug/L			09/19/13 02:13	1
Naphthalene	<5.00		5.00	0.430	ug/L			09/19/13 02:13	1
n-Butylbenzene	<1.00		1.00	0.640	ug/L			09/19/13 02:13	1
N-Propylbenzene	<1.00		1.00	0.690	ug/L			09/19/13 02:13	1
o-Xylene	<1.00		1.00	0.760	ug/L			09/19/13 02:13	1
sec-Butylbenzene	<1.00		1.00	0.750	ug/L			09/19/13 02:13	1
Styrene	<1.00		1.00	0.730	ug/L			09/19/13 02:13	1
Tert-amyl methyl ether	<5.00		5.00	0.270	ug/L			09/19/13 02:13	1
Tert-butyl ethyl ether	<5.00		5.00	0.294	ug/L			09/19/13 02:13	1
tert-Butylbenzene	<1.00		1.00	0.810	ug/L			09/19/13 02:13	1
Tetrachloroethene	<1.00		1.00	0.360	ug/L			09/19/13 02:13	1
Tetrahydrofuran	3.19	J	10.0	1.25	ug/L			09/19/13 02:13	1
Toluene	<1.00		1.00	0.510	ug/L			09/19/13 02:13	1
trans-1,2-Dichloroethene	<1.00		1.00	0.900	ug/L			09/19/13 02:13	1
trans-1,3-Dichloropropene	<0.400		0.400	0.370	ug/L			09/19/13 02:13	1
Trichloroethene	<1.00		1.00	0.460	ug/L			09/19/13 02:13	1
Trichlorofluoromethane	<1.00		1.00	0.880	ug/L			09/19/13 02:13	1
Vinyl chloride	<1.00		1.00	0.900	ug/L			09/19/13 02:13	1
Dibromomethane	<1.00		1.00	0.410	ug/L			09/19/13 02:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		70 - 130		09/19/13 02:13	1
1,2-Dichloroethane-d4 (Surr)	108		70 - 130		09/19/13 02:13	1
4-Bromofluorobenzene (Surr)	99		70 - 130		09/19/13 02:13	1

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (70-130)	12DCE (70-130)	BFB (70-130)
480-45969-7	WCSS-17-(0-0.25)	102	103	102
480-45969-10	WCSS-21-(0-0.25)	99	97	97
480-45969-12	WCSS-23-(0-0.25)	96	112	98
480-45969-13	WCSS-25-(0-0.25)	101	96	97
480-45969-15	WCSS-26-(0-0.25)	95	110	98
480-45969-16	WCSS-27-(0-0.25)	96	111	98
480-45969-17	WCSS-28-(0-0.25)	101	97	100
480-45969-22	WCSS-33-(0-0.25)	103	98	97
480-45969-23	WCSS-34-(0-0.25)	103	100	97
480-45969-24	WCSS-35-(0-0.25)	96	114	104
480-45969-28	WCSS-40-(0-0.25)	99	103	98
480-45969-31	WCSS-44-(0-0.25)	99	97	96
LCS 480-139791/20-A	Lab Control Sample	95	109	99
LCS 480-139971/4	Lab Control Sample	100	95	101
LCSD 480-139791/21-A	Lab Control Sample Dup	94	107	98
LCSD 480-139971/6	Lab Control Sample Dup	100	97	101
MB 480-139791/22-A	Method Blank	93	105	93
MB 480-139971/35	Method Blank	98	96	99

Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (70-130)	12DCE (70-130)	BFB (70-130)
480-45969-38	TB-09162013	98	108	99
LCS 480-139838/4	Lab Control Sample	100	107	103
LCSD 480-139838/5	Lab Control Sample Dup	100	110	103
MB 480-139838/7	Method Blank	97	111	99

Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		25DBT2 (70-130)	25DBT1 (70-130)
480-45969-7	WCSS-17-(0-0.25)	76	83
480-45969-10	WCSS-21-(0-0.25)	76	81
480-45969-12	WCSS-23-(0-0.25)	76	84
480-45969-13	WCSS-25-(0-0.25)	76	81

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		25DBT2 (70-130)	25DBT1 (70-130)
480-45969-15	WCSS-26-(0-0.25)	76	82
480-45969-16	WCSS-27-(0-0.25)	82	85
480-45969-17	WCSS-28-(0-0.25)	75	81
480-45969-22	WCSS-33-(0-0.25)	102	100
480-45969-23	WCSS-34-(0-0.25)	78	82
480-45969-24	WCSS-35-(0-0.25)	102	99
480-45969-28	WCSS-40-(0-0.25)	115	93
480-45969-31	WCSS-44-(0-0.25)	76	82
LCS 480-139702/2-A	Lab Control Sample	80	88
LCS 480-139702/2-A	Lab Control Sample	80	87
LCS 480-139702/2-A	Lab Control Sample	98	97
LCSD 480-139702/3-A	Lab Control Sample Dup	79	86
LCSD 480-139702/3-A	Lab Control Sample Dup	77	84
LCSD 480-139702/3-A	Lab Control Sample Dup	95	95
MB 480-139702/1-A	Method Blank	80	89
MB 480-139702/1-A	Method Blank	81	89
MB 480-139702/1-A	Method Blank	98	98

Surrogate Legend

25DBT = 2,5-Dibromotoluene (fid)

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		1COD2 (40-140)	2BN1 (40-140)	FBP1 (40-140)	OTPH1 (40-140)
480-45969-7	WCSS-17-(0-0.25)	53	94	112	65
480-45969-10	WCSS-21-(0-0.25)	27 X	91	112	30 X
480-45969-12	WCSS-23-(0-0.25)	19 X	90	108	22 X
480-45969-13	WCSS-25-(0-0.25)	42	95	112	46
480-45969-15	WCSS-26-(0-0.25)	44	93	110	51
480-45969-16	WCSS-27-(0-0.25)	22 X	89	108	55
480-45969-17	WCSS-28-(0-0.25)	15 X	89	103	18 X
480-45969-22	WCSS-33-(0-0.25)	29 X	95	111	35 X
480-45969-23	WCSS-34-(0-0.25)	38 X	96	110	42
480-45969-24	WCSS-35-(0-0.25)	49	96	109	59
480-45969-28	WCSS-40-(0-0.25)	31 X	90	104	39 X
480-45969-31	WCSS-44-(0-0.25)	46	95	107	55
LCS 480-139607/2-B	Lab Control Sample	67	101	119	82
LCSD 480-139607/3-B	Lab Control Sample Dup	71	95	113	85
MB 480-139607/1-B	Method Blank	70	88	106	80

Surrogate Legend

1COD = 1-Chlorooctadecane

2BN = 2-Bromonaphthalene

FBP = 2-Fluorobiphenyl

OTPH = o-Terphenyl

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-139791/22-A

Matrix: Solid

Analysis Batch: 140106

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139791

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.125		0.125	0.0250	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,1,1-Trichloroethane	<0.125		0.125	0.0182	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,1,2,2-Tetrachloroethane	<0.125		0.125	0.0406	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,1,2-Trichloroethane	<0.125		0.125	0.0325	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,1-Dichloroethane	<0.125		0.125	0.0305	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,1-Dichloroethene	<0.125		0.125	0.0306	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,1-Dichloropropene	<0.125		0.125	0.0355	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,2,3-Trichlorobenzene	<0.125		0.125	0.0266	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,2,3-Trichloropropane	<0.125		0.125	0.0255	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,2,4-Trichlorobenzene	<0.125		0.125	0.0152	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,2,4-Trimethylbenzene	<0.125		0.125	0.0480	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,2-Dibromo-3-Chloropropane	<1.25		1.25	0.125	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,2-Dichlorobenzene	<0.125		0.125	0.0196	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,2-Dichloroethane	<0.125		0.125	0.0126	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,2-Dichloropropane	<0.125		0.125	0.125	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,3,5-Trimethylbenzene	<0.125		0.125	0.0161	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,3-Dichlorobenzene	<0.125		0.125	0.0129	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,3-Dichloropropane	<0.125		0.125	0.0150	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,4-Dichlorobenzene	<0.125		0.125	0.0350	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
1,4-Dioxane	<12.5		12.5	1.21	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
2,2-Dichloropropane	<0.125		0.125	0.0425	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
2-Butanone (MEK)	<1.25		1.25	0.0915	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
2-Chlorotoluene	<0.125		0.125	0.0164	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
2-Hexanone	<1.25		1.25	0.125	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
4-Chlorotoluene	<0.125		0.125	0.0295	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
4-Isopropyltoluene	<0.125		0.125	0.0201	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
4-Methyl-2-pentanone (MIBK)	<1.25		1.25	0.0820	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Acetone	<12.5		12.5	0.211	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Benzene	<0.125		0.125	0.0123	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Bromobenzene	<0.125		0.125	0.0440	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Bromoform	<0.125		0.125	0.125	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Bromomethane	<0.250		0.250	0.0225	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Carbon disulfide	<0.125		0.125	0.125	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Carbon tetrachloride	<0.125		0.125	0.0242	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Chlorobenzene	<0.125		0.125	0.0330	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Chlorobromomethane	<0.125		0.125	0.0181	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Chlorodibromomethane	<0.125		0.125	0.0320	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Chloroethane	<0.250		0.250	0.0565	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Chloroform	<0.125		0.125	0.0155	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Chloromethane	<0.250		0.250	0.0151	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
cis-1,2-Dichloroethene	<0.125		0.125	0.0320	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
cis-1,3-Dichloropropene	<0.125		0.125	0.0360	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Dichlorobromomethane	<0.125		0.125	0.0335	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Dichlorodifluoromethane	<0.250		0.250	0.0207	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Ethyl ether	<0.125		0.125	0.105	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Ethylbenzene	<0.125		0.125	0.0173	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Ethylene Dibromide	<0.125		0.125	0.0321	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Hexachlorobutadiene	<0.125		0.125	0.0293	mg/Kg		09/19/13 18:34	09/19/13 23:40	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-139791/22-A

Matrix: Solid

Analysis Batch: 140106

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139791

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.125		0.125	0.125	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Isopropylbenzene	<0.125		0.125	0.0377	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Methyl tert-butyl ether	<0.125		0.125	0.0246	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Methylene Chloride	<0.125		0.125	0.115	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
m-Xylene & p-Xylene	<0.250		0.250	0.0420	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Naphthalene	<1.25		1.25	0.0335	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
n-Butylbenzene	<0.125		0.125	0.0218	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
N-Propylbenzene	<0.125		0.125	0.0200	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
o-Xylene	<0.125		0.125	0.0327	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
sec-Butylbenzene	<0.125		0.125	0.0218	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Styrene	<0.125		0.125	0.0125	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Tert-amyl methyl ether	<0.125		0.125	0.0640	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Tert-butyl ethyl ether	<0.125		0.125	0.110	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
tert-Butylbenzene	<0.125		0.125	0.0260	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Tetrachloroethene	<0.125		0.125	0.0336	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Tetrahydrofuran	<2.50		2.50	0.230	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Toluene	<0.125		0.125	0.0189	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
trans-1,2-Dichloroethene	<0.125		0.125	0.0258	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
trans-1,3-Dichloropropene	<0.125		0.125	0.110	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Trichloroethene	<0.125		0.125	0.0550	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Trichlorofluoromethane	<0.250		0.250	0.0237	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Vinyl chloride	<0.125		0.125	0.0305	mg/Kg		09/19/13 18:34	09/19/13 23:40	1
Dibromomethane	<0.125		0.125	0.0258	mg/Kg		09/19/13 18:34	09/19/13 23:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	93		70 - 130	09/19/13 18:34	09/19/13 23:40	1
1,2-Dichloroethane-d4 (Surr)	105		70 - 130	09/19/13 18:34	09/19/13 23:40	1
4-Bromofluorobenzene (Surr)	93		70 - 130	09/19/13 18:34	09/19/13 23:40	1

Lab Sample ID: LCS 480-139791/20-A

Matrix: Solid

Analysis Batch: 140106

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	1.25	1.319		mg/Kg		105	70 - 130
1,1,1-Trichloroethane	1.25	1.441		mg/Kg		115	70 - 130
1,1,2,2-Tetrachloroethane	1.25	1.207		mg/Kg		97	70 - 130
1,1,2-Trichloroethane	1.25	1.244		mg/Kg		99	70 - 130
1,1-Dichloroethane	1.25	1.393		mg/Kg		111	70 - 130
1,1-Dichloroethene	1.25	1.345		mg/Kg		108	70 - 130
1,1-Dichloropropene	1.25	1.382		mg/Kg		111	70 - 130
1,2,3-Trichlorobenzene	1.25	1.283		mg/Kg		103	70 - 130
1,2,3-Trichloropropane	1.25	1.190		mg/Kg		95	70 - 130
1,2,4-Trichlorobenzene	1.25	1.367		mg/Kg		109	70 - 130
1,2,4-Trimethylbenzene	1.25	1.318		mg/Kg		105	70 - 130
1,2-Dibromo-3-Chloropropane	1.25	1.479		mg/Kg		118	70 - 130
1,2-Dichlorobenzene	1.25	1.257		mg/Kg		101	70 - 130
1,2-Dichloroethane	1.25	1.465		mg/Kg		117	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-139791/20-A

Matrix: Solid

Analysis Batch: 140106

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	1.25	1.303		mg/Kg		104	70 - 130
1,3,5-Trimethylbenzene	1.25	1.329		mg/Kg		106	70 - 130
1,3-Dichlorobenzene	1.25	1.277		mg/Kg		102	70 - 130
1,3-Dichloropropane	1.25	1.236		mg/Kg		99	70 - 130
1,4-Dichlorobenzene	1.25	1.290		mg/Kg		103	70 - 130
1,4-Dioxane	50.0	56.86		mg/Kg		114	70 - 130
2,2-Dichloropropane	1.25	1.375		mg/Kg		110	70 - 130
2-Butanone (MEK)	6.25	9.241	*	mg/Kg		148	70 - 130
2-Chlorotoluene	1.25	1.244		mg/Kg		99	70 - 130
2-Hexanone	6.25	6.496		mg/Kg		104	70 - 130
4-Chlorotoluene	1.25	1.315		mg/Kg		105	70 - 130
4-Isopropyltoluene	1.25	1.385		mg/Kg		111	70 - 130
4-Methyl-2-pentanone (MIBK)	6.25	6.436		mg/Kg		103	70 - 130
Acetone	6.25	6.967	J	mg/Kg		111	70 - 130
Benzene	1.25	1.322		mg/Kg		106	70 - 130
Bromobenzene	1.25	1.205		mg/Kg		96	70 - 130
Bromoform	1.25	1.109		mg/Kg		89	70 - 130
Bromomethane	1.25	1.108		mg/Kg		89	70 - 130
Carbon disulfide	1.25	1.342		mg/Kg		107	70 - 130
Carbon tetrachloride	1.25	1.484		mg/Kg		119	70 - 130
Chlorobenzene	1.25	1.271		mg/Kg		102	70 - 130
Chlorobromomethane	1.25	1.296		mg/Kg		104	70 - 130
Chlorodibromomethane	1.25	1.177		mg/Kg		94	70 - 130
Chloroethane	1.25	1.223		mg/Kg		98	70 - 130
Chloroform	1.25	1.370		mg/Kg		110	70 - 130
Chloromethane	1.25	1.364		mg/Kg		109	70 - 130
cis-1,2-Dichloroethene	1.25	1.315		mg/Kg		105	70 - 130
cis-1,3-Dichloropropene	1.25	1.430		mg/Kg		114	70 - 130
Dichlorobromomethane	1.25	1.394		mg/Kg		111	70 - 130
Dichlorodifluoromethane	2.50	2.916		mg/Kg		117	70 - 130
Ethyl ether	1.25	1.339		mg/Kg		107	70 - 130
Ethylbenzene	1.25	1.302		mg/Kg		104	70 - 130
Ethylene Dibromide	1.25	1.314		mg/Kg		105	70 - 130
Hexachlorobutadiene	1.25	1.396		mg/Kg		112	70 - 130
Isopropyl ether	1.25	1.431		mg/Kg		114	70 - 130
Isopropylbenzene	1.25	1.294		mg/Kg		104	70 - 130
Methyl tert-butyl ether	1.25	1.317		mg/Kg		105	70 - 130
Methylene Chloride	1.25	1.302		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	2.50	2.564		mg/Kg		103	70 - 130
Naphthalene	1.25	1.280		mg/Kg		102	70 - 130
n-Butylbenzene	1.25	1.404		mg/Kg		112	70 - 130
N-Propylbenzene	1.25	1.313		mg/Kg		105	70 - 130
o-Xylene	1.25	1.296		mg/Kg		104	70 - 130
sec-Butylbenzene	1.25	1.337		mg/Kg		107	70 - 130
Styrene	1.25	1.308		mg/Kg		105	70 - 130
Tert-amyl methyl ether	1.25	1.289		mg/Kg		103	70 - 130
Tert-butyl ethyl ether	1.25	1.370		mg/Kg		110	70 - 130
tert-Butylbenzene	1.25	1.298		mg/Kg		104	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-139791/20-A

Matrix: Solid

Analysis Batch: 140106

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	1.25	1.404		mg/Kg		112	70 - 130
Tetrahydrofuran	6.25	6.290		mg/Kg		101	70 - 130
Toluene	1.25	1.246		mg/Kg		100	70 - 130
trans-1,2-Dichloroethene	1.25	1.321		mg/Kg		106	70 - 130
trans-1,3-Dichloropropene	1.25	1.372		mg/Kg		110	70 - 130
Trichloroethene	1.25	1.392		mg/Kg		111	70 - 130
Trichlorofluoromethane	1.25	1.561		mg/Kg		125	70 - 130
Vinyl chloride	1.25	1.397		mg/Kg		112	70 - 130
Dibromomethane	1.25	1.311		mg/Kg		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	95		70 - 130
1,2-Dichloroethane-d4 (Surr)	109		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 480-139791/21-A

Matrix: Solid

Analysis Batch: 140106

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139791

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	1.25	1.258		mg/Kg		101	70 - 130	5	20
1,1,1-Trichloroethane	1.25	1.306		mg/Kg		104	70 - 130	10	20
1,1,2,2-Tetrachloroethane	1.25	1.240		mg/Kg		99	70 - 130	3	20
1,1,2-Trichloroethane	1.25	1.231		mg/Kg		98	70 - 130	1	20
1,1-Dichloroethane	1.25	1.260		mg/Kg		101	70 - 130	10	20
1,1-Dichloroethene	1.25	1.201		mg/Kg		96	70 - 130	11	20
1,1-Dichloropropene	1.25	1.262		mg/Kg		101	70 - 130	9	20
1,2,3-Trichlorobenzene	1.25	1.320		mg/Kg		106	70 - 130	3	20
1,2,3-Trichloropropane	1.25	1.223		mg/Kg		98	70 - 130	3	20
1,2,4-Trichlorobenzene	1.25	1.349		mg/Kg		108	70 - 130	1	20
1,2,4-Trimethylbenzene	1.25	1.268		mg/Kg		101	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	1.25	1.502		mg/Kg		120	70 - 130	2	20
1,2-Dichlorobenzene	1.25	1.250		mg/Kg		100	70 - 130	1	20
1,2-Dichloroethane	1.25	1.423		mg/Kg		114	70 - 130	3	20
1,2-Dichloropropane	1.25	1.227		mg/Kg		98	70 - 130	6	20
1,3,5-Trimethylbenzene	1.25	1.288		mg/Kg		103	70 - 130	3	20
1,3-Dichlorobenzene	1.25	1.232		mg/Kg		99	70 - 130	4	20
1,3-Dichloropropane	1.25	1.222		mg/Kg		98	70 - 130	1	20
1,4-Dichlorobenzene	1.25	1.246		mg/Kg		100	70 - 130	3	20
1,4-Dioxane	50.0	53.70		mg/Kg		107	70 - 130	6	20
2,2-Dichloropropane	1.25	1.304		mg/Kg		104	70 - 130	5	20
2-Butanone (MEK)	6.25	9.020	*	mg/Kg		144	70 - 130	2	20
2-Chlorotoluene	1.25	1.231		mg/Kg		98	70 - 130	1	20
2-Hexanone	6.25	6.436		mg/Kg		103	70 - 130	1	20
4-Chlorotoluene	1.25	1.283		mg/Kg		103	70 - 130	3	20
4-Isopropyltoluene	1.25	1.279		mg/Kg		102	70 - 130	8	20
4-Methyl-2-pentanone (MIBK)	6.25	6.377		mg/Kg		102	70 - 130	1	20
Acetone	6.25	6.831	J	mg/Kg		109	70 - 130	2	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-139791/21-A

Matrix: Solid

Analysis Batch: 140106

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139791

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	1.25	1.218		mg/Kg		97	70 - 130	8	20
Bromobenzene	1.25	1.217		mg/Kg		97	70 - 130	1	20
Bromoform	1.25	1.136		mg/Kg		91	70 - 130	2	20
Bromomethane	1.25	1.043		mg/Kg		83	70 - 130	6	20
Carbon disulfide	1.25	1.211		mg/Kg		97	70 - 130	10	20
Carbon tetrachloride	1.25	1.354		mg/Kg		108	70 - 130	9	20
Chlorobenzene	1.25	1.224		mg/Kg		98	70 - 130	4	20
Chlorobromomethane	1.25	1.267		mg/Kg		101	70 - 130	2	20
Chlorodibromomethane	1.25	1.176		mg/Kg		94	70 - 130	0	20
Chloroethane	1.25	1.129		mg/Kg		90	70 - 130	8	20
Chloroform	1.25	1.281		mg/Kg		102	70 - 130	7	20
Chloromethane	1.25	1.217		mg/Kg		97	70 - 130	11	20
cis-1,2-Dichloroethene	1.25	1.222		mg/Kg		98	70 - 130	7	20
cis-1,3-Dichloropropene	1.25	1.338		mg/Kg		107	70 - 130	7	20
Dichlorobromomethane	1.25	1.314		mg/Kg		105	70 - 130	6	20
Dichlorodifluoromethane	2.50	2.507		mg/Kg		100	70 - 130	15	20
Ethyl ether	1.25	1.302		mg/Kg		104	70 - 130	3	20
Ethylbenzene	1.25	1.198		mg/Kg		96	70 - 130	8	20
Ethylene Dibromide	1.25	1.271		mg/Kg		102	70 - 130	3	20
Hexachlorobutadiene	1.25	1.264		mg/Kg		101	70 - 130	10	20
Isopropyl ether	1.25	1.375		mg/Kg		110	70 - 130	4	20
Isopropylbenzene	1.25	1.220		mg/Kg		98	70 - 130	6	20
Methyl tert-butyl ether	1.25	1.273		mg/Kg		102	70 - 130	3	20
Methylene Chloride	1.25	1.205		mg/Kg		96	70 - 130	8	20
m-Xylene & p-Xylene	2.50	2.393		mg/Kg		96	70 - 130	7	20
Naphthalene	1.25	1.287		mg/Kg		103	70 - 130	1	20
n-Butylbenzene	1.25	1.312		mg/Kg		105	70 - 130	7	20
N-Propylbenzene	1.25	1.260		mg/Kg		101	70 - 130	4	20
o-Xylene	1.25	1.196		mg/Kg		96	70 - 130	8	20
sec-Butylbenzene	1.25	1.273		mg/Kg		102	70 - 130	5	20
Styrene	1.25	1.225		mg/Kg		98	70 - 130	7	20
Tert-amyl methyl ether	1.25	1.249		mg/Kg		100	70 - 130	3	20
Tert-butyl ethyl ether	1.25	1.341		mg/Kg		107	70 - 130	2	20
tert-Butylbenzene	1.25	1.280		mg/Kg		102	70 - 130	1	20
Tetrachloroethene	1.25	1.351		mg/Kg		108	70 - 130	4	20
Tetrahydrofuran	6.25	5.995		mg/Kg		96	70 - 130	5	20
Toluene	1.25	1.168		mg/Kg		93	70 - 130	6	20
trans-1,2-Dichloroethene	1.25	1.183		mg/Kg		95	70 - 130	11	20
trans-1,3-Dichloropropene	1.25	1.332		mg/Kg		107	70 - 130	3	20
Trichloroethene	1.25	1.263		mg/Kg		101	70 - 130	10	20
Trichlorofluoromethane	1.25	1.395		mg/Kg		112	70 - 130	11	20
Vinyl chloride	1.25	1.231		mg/Kg		98	70 - 130	13	20
Dibromomethane	1.25	1.314		mg/Kg		105	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	94		70 - 130
1,2-Dichloroethane-d4 (Surr)	107		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-139838/7

Matrix: Water

Analysis Batch: 139838

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			09/18/13 23:46	1
1,1,1-Trichloroethane	<1.00		1.00	0.820	ug/L			09/18/13 23:46	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.210	ug/L			09/18/13 23:46	1
1,1,2-Trichloroethane	<1.00		1.00	0.230	ug/L			09/18/13 23:46	1
1,1-Dichloroethane	<1.00		1.00	0.380	ug/L			09/18/13 23:46	1
1,1-Dichloroethene	<1.00		1.00	0.290	ug/L			09/18/13 23:46	1
1,1-Dichloropropene	<1.00		1.00	0.720	ug/L			09/18/13 23:46	1
1,2,3-Trichlorobenzene	<1.00		1.00	0.410	ug/L			09/18/13 23:46	1
1,2,3-Trichloropropane	<1.00		1.00	0.890	ug/L			09/18/13 23:46	1
1,2,4-Trichlorobenzene	<1.00		1.00	0.410	ug/L			09/18/13 23:46	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.750	ug/L			09/18/13 23:46	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.390	ug/L			09/18/13 23:46	1
1,2-Dichlorobenzene	<1.00		1.00	0.790	ug/L			09/18/13 23:46	1
1,2-Dichloroethane	<1.00		1.00	0.210	ug/L			09/18/13 23:46	1
1,2-Dichloropropane	<1.00		1.00	0.720	ug/L			09/18/13 23:46	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.770	ug/L			09/18/13 23:46	1
1,3-Dichlorobenzene	<1.00		1.00	0.780	ug/L			09/18/13 23:46	1
1,3-Dichloropropane	<1.00		1.00	0.750	ug/L			09/18/13 23:46	1
1,4-Dichlorobenzene	<1.00		1.00	0.840	ug/L			09/18/13 23:46	1
1,4-Dioxane	<50.0		50.0	9.32	ug/L			09/18/13 23:46	1
2,2-Dichloropropane	<1.00		1.00	0.400	ug/L			09/18/13 23:46	1
2-Butanone (MEK)	<10.0		10.0	1.32	ug/L			09/18/13 23:46	1
2-Chlorotoluene	<1.00		1.00	0.860	ug/L			09/18/13 23:46	1
2-Hexanone	<10.0		10.0	1.24	ug/L			09/18/13 23:46	1
4-Chlorotoluene	<1.00		1.00	0.840	ug/L			09/18/13 23:46	1
4-Isopropyltoluene	<1.00		1.00	0.310	ug/L			09/18/13 23:46	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			09/18/13 23:46	1
Acetone	<50.0		50.0	3.00	ug/L			09/18/13 23:46	1
Benzene	<1.00		1.00	0.410	ug/L			09/18/13 23:46	1
Bromobenzene	<1.00		1.00	0.800	ug/L			09/18/13 23:46	1
Bromoform	<1.00		1.00	0.260	ug/L			09/18/13 23:46	1
Bromomethane	<2.00		2.00	0.690	ug/L			09/18/13 23:46	1
Carbon disulfide	<10.0		10.0	0.190	ug/L			09/18/13 23:46	1
Carbon tetrachloride	<1.00		1.00	0.270	ug/L			09/18/13 23:46	1
Chlorobenzene	<1.00		1.00	0.750	ug/L			09/18/13 23:46	1
Chlorobromomethane	<1.00		1.00	0.870	ug/L			09/18/13 23:46	1
Chlorodibromomethane	<0.500		0.500	0.320	ug/L			09/18/13 23:46	1
Chloroethane	<2.00		2.00	0.320	ug/L			09/18/13 23:46	1
Chloroform	<1.00		1.00	0.340	ug/L			09/18/13 23:46	1
Chloromethane	<2.00		2.00	0.350	ug/L			09/18/13 23:46	1
cis-1,2-Dichloroethene	<1.00		1.00	0.810	ug/L			09/18/13 23:46	1
cis-1,3-Dichloropropene	<0.400		0.400	0.360	ug/L			09/18/13 23:46	1
Dichlorobromomethane	<0.500		0.500	0.390	ug/L			09/18/13 23:46	1
Dichlorodifluoromethane	<1.00		1.00	0.680	ug/L			09/18/13 23:46	1
Ethyl ether	<1.00		1.00	0.720	ug/L			09/18/13 23:46	1
Ethylbenzene	<1.00		1.00	0.740	ug/L			09/18/13 23:46	1
Ethylene Dibromide	<1.00		1.00	0.730	ug/L			09/18/13 23:46	1
Hexachlorobutadiene	<0.400		0.400	0.280	ug/L			09/18/13 23:46	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-139838/7

Matrix: Water

Analysis Batch: 139838

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	0.590	ug/L			09/18/13 23:46	1
Isopropylbenzene	<1.00		1.00	0.790	ug/L			09/18/13 23:46	1
Methyl tert-butyl ether	<1.00		1.00	0.160	ug/L			09/18/13 23:46	1
Methylene Chloride	<1.00		1.00	0.440	ug/L			09/18/13 23:46	1
m-Xylene & p-Xylene	<2.00		2.00	0.660	ug/L			09/18/13 23:46	1
Naphthalene	<5.00		5.00	0.430	ug/L			09/18/13 23:46	1
n-Butylbenzene	<1.00		1.00	0.640	ug/L			09/18/13 23:46	1
N-Propylbenzene	<1.00		1.00	0.690	ug/L			09/18/13 23:46	1
o-Xylene	<1.00		1.00	0.760	ug/L			09/18/13 23:46	1
sec-Butylbenzene	<1.00		1.00	0.750	ug/L			09/18/13 23:46	1
Styrene	<1.00		1.00	0.730	ug/L			09/18/13 23:46	1
Tert-amyl methyl ether	<5.00		5.00	0.270	ug/L			09/18/13 23:46	1
Tert-butyl ethyl ether	<5.00		5.00	0.294	ug/L			09/18/13 23:46	1
tert-Butylbenzene	<1.00		1.00	0.810	ug/L			09/18/13 23:46	1
Tetrachloroethene	<1.00		1.00	0.360	ug/L			09/18/13 23:46	1
Tetrahydrofuran	<10.0		10.0	1.25	ug/L			09/18/13 23:46	1
Toluene	<1.00		1.00	0.510	ug/L			09/18/13 23:46	1
trans-1,2-Dichloroethene	<1.00		1.00	0.900	ug/L			09/18/13 23:46	1
trans-1,3-Dichloropropene	<0.400		0.400	0.370	ug/L			09/18/13 23:46	1
Trichloroethene	<1.00		1.00	0.460	ug/L			09/18/13 23:46	1
Trichlorofluoromethane	<1.00		1.00	0.880	ug/L			09/18/13 23:46	1
Vinyl chloride	<1.00		1.00	0.900	ug/L			09/18/13 23:46	1
Dibromomethane	<1.00		1.00	0.410	ug/L			09/18/13 23:46	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		70 - 130		09/18/13 23:46	1
1,2-Dichloroethane-d4 (Surr)	111		70 - 130		09/18/13 23:46	1
4-Bromofluorobenzene (Surr)	99		70 - 130		09/18/13 23:46	1

Lab Sample ID: LCS 480-139838/4

Matrix: Water

Analysis Batch: 139838

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.10		ug/L		104	70 - 130
1,1,1-Trichloroethane	25.0	27.33		ug/L		109	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.94		ug/L		104	70 - 130
1,1,2-Trichloroethane	25.0	25.86		ug/L		103	70 - 130
1,1-Dichloroethane	25.0	26.47		ug/L		106	70 - 130
1,1-Dichloroethene	25.0	26.63		ug/L		107	70 - 130
1,1-Dichloropropene	25.0	26.54		ug/L		106	70 - 130
1,2,3-Trichlorobenzene	25.0	26.60		ug/L		106	70 - 130
1,2,3-Trichloropropane	25.0	25.39		ug/L		102	70 - 130
1,2,4-Trichlorobenzene	25.0	26.78		ug/L		107	70 - 130
1,2,4-Trimethylbenzene	25.0	26.67		ug/L		107	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	31.56		ug/L		126	70 - 130
1,2-Dichlorobenzene	25.0	25.90		ug/L		104	70 - 130
1,2-Dichloroethane	25.0	27.58		ug/L		110	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-139838/4

Matrix: Water

Analysis Batch: 139838

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	25.42		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	25.0	26.86		ug/L		107	70 - 130
1,3-Dichlorobenzene	25.0	25.77		ug/L		103	70 - 130
1,3-Dichloropropane	25.0	25.64		ug/L		103	70 - 130
1,4-Dichlorobenzene	25.0	25.73		ug/L		103	70 - 130
1,4-Dioxane	1000	1183		ug/L		118	70 - 130
2,2-Dichloropropane	25.0	27.60		ug/L		110	70 - 130
2-Butanone (MEK)	125	187.4	*	ug/L		150	70 - 130
2-Chlorotoluene	25.0	25.24		ug/L		101	70 - 130
2-Hexanone	125	136.7		ug/L		109	70 - 130
4-Chlorotoluene	25.0	26.60		ug/L		106	70 - 130
4-Isopropyltoluene	25.0	27.41		ug/L		110	70 - 130
4-Methyl-2-pentanone (MIBK)	125	136.0		ug/L		109	70 - 130
Acetone	125	141.4		ug/L		113	70 - 130
Benzene	25.0	25.76		ug/L		103	70 - 130
Bromobenzene	25.0	24.94		ug/L		100	70 - 130
Bromoform	25.0	23.50		ug/L		94	70 - 130
Bromomethane	25.0	24.23		ug/L		97	70 - 130
Carbon disulfide	25.0	27.67		ug/L		111	70 - 130
Carbon tetrachloride	25.0	28.00		ug/L		112	70 - 130
Chlorobenzene	25.0	25.56		ug/L		102	70 - 130
Chlorobromomethane	25.0	25.20		ug/L		101	70 - 130
Chlorodibromomethane	25.0	24.14		ug/L		97	70 - 130
Chloroethane	25.0	25.65		ug/L		103	70 - 130
Chloroform	25.0	26.41		ug/L		106	70 - 130
Chloromethane	25.0	26.52		ug/L		106	70 - 130
cis-1,2-Dichloroethene	25.0	26.27		ug/L		105	70 - 130
cis-1,3-Dichloropropene	25.0	28.38		ug/L		114	70 - 130
Dichlorobromomethane	25.0	27.29		ug/L		109	70 - 130
Dichlorodifluoromethane	50.0	62.45		ug/L		125	70 - 130
Ethyl ether	25.0	25.85		ug/L		103	70 - 130
Ethylbenzene	25.0	25.87		ug/L		103	70 - 130
Ethylene Dibromide	25.0	26.90		ug/L		108	70 - 130
Hexachlorobutadiene	25.0	27.27		ug/L		109	70 - 130
Isopropyl ether	25.0	28.14		ug/L		113	70 - 130
Isopropylbenzene	25.0	25.80		ug/L		103	70 - 130
Methyl tert-butyl ether	25.0	25.61		ug/L		102	70 - 130
Methylene Chloride	25.0	25.17		ug/L		101	70 - 130
m-Xylene & p-Xylene	50.0	51.78		ug/L		104	70 - 130
Naphthalene	25.0	27.00		ug/L		108	70 - 130
n-Butylbenzene	25.0	27.70		ug/L		111	70 - 130
N-Propylbenzene	25.0	26.58		ug/L		106	70 - 130
o-Xylene	25.0	25.82		ug/L		103	70 - 130
sec-Butylbenzene	25.0	27.13		ug/L		109	70 - 130
Styrene	25.0	26.32		ug/L		105	70 - 130
Tert-amyl methyl ether	25.0	25.17		ug/L		101	70 - 130
Tert-butyl ethyl ether	25.0	26.56		ug/L		106	70 - 130
tert-Butylbenzene	25.0	26.33		ug/L		105	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-139838/4

Matrix: Water

Analysis Batch: 139838

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	28.27		ug/L		113	70 - 130
Tetrahydrofuran	125	125.9		ug/L		101	70 - 130
Toluene	25.0	25.50		ug/L		102	70 - 130
trans-1,2-Dichloroethene	25.0	25.91		ug/L		104	70 - 130
trans-1,3-Dichloropropene	25.0	27.59		ug/L		110	70 - 130
Trichloroethene	25.0	26.29		ug/L		105	70 - 130
Trichlorofluoromethane	25.0	29.59		ug/L		118	70 - 130
Vinyl chloride	25.0	26.94		ug/L		108	70 - 130
Dibromomethane	25.0	25.86		ug/L		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	107		70 - 130
4-Bromofluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 480-139838/5

Matrix: Water

Analysis Batch: 139838

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	26.12		ug/L		104	70 - 130	0	20
1,1,1-Trichloroethane	25.0	26.49		ug/L		106	70 - 130	3	20
1,1,2,2-Tetrachloroethane	25.0	25.38		ug/L		102	70 - 130	2	20
1,1,2-Trichloroethane	25.0	24.95		ug/L		100	70 - 130	4	20
1,1-Dichloroethane	25.0	25.57		ug/L		102	70 - 130	3	20
1,1-Dichloroethene	25.0	24.86		ug/L		99	70 - 130	7	20
1,1-Dichloropropene	25.0	25.56		ug/L		102	70 - 130	4	20
1,2,3-Trichlorobenzene	25.0	26.66		ug/L		107	70 - 130	0	20
1,2,3-Trichloropropane	25.0	25.08		ug/L		100	70 - 130	1	20
1,2,4-Trichlorobenzene	25.0	26.75		ug/L		107	70 - 130	0	20
1,2,4-Trimethylbenzene	25.0	25.13		ug/L		101	70 - 130	6	20
1,2-Dibromo-3-Chloropropane	25.0	31.27		ug/L		125	70 - 130	1	20
1,2-Dichlorobenzene	25.0	24.74		ug/L		99	70 - 130	5	20
1,2-Dichloroethane	25.0	28.14		ug/L		113	70 - 130	2	20
1,2-Dichloropropane	25.0	25.56		ug/L		102	70 - 130	1	20
1,3,5-Trimethylbenzene	25.0	25.39		ug/L		102	70 - 130	6	20
1,3-Dichlorobenzene	25.0	24.30		ug/L		97	70 - 130	6	20
1,3-Dichloropropane	25.0	25.09		ug/L		100	70 - 130	2	20
1,4-Dichlorobenzene	25.0	24.93		ug/L		100	70 - 130	3	20
1,4-Dioxane	1000	1162		ug/L		116	70 - 130	2	20
2,2-Dichloropropane	25.0	25.50		ug/L		102	70 - 130	8	20
2-Butanone (MEK)	125	187.8	*	ug/L		150	70 - 130	0	20
2-Chlorotoluene	25.0	24.28		ug/L		97	70 - 130	4	20
2-Hexanone	125	135.3		ug/L		108	70 - 130	1	20
4-Chlorotoluene	25.0	25.95		ug/L		104	70 - 130	2	20
4-Isopropyltoluene	25.0	26.28		ug/L		105	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	125	134.4		ug/L		107	70 - 130	1	20
Acetone	125	143.5		ug/L		115	70 - 130	2	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-139838/5

Matrix: Water

Analysis Batch: 139838

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	25.0	25.14		ug/L		101	70 - 130	2	20
Bromobenzene	25.0	24.31		ug/L		97	70 - 130	3	20
Bromoform	25.0	23.56		ug/L		94	70 - 130	0	20
Bromomethane	25.0	23.85		ug/L		95	70 - 130	2	20
Carbon disulfide	25.0	26.06		ug/L		104	70 - 130	6	20
Carbon tetrachloride	25.0	27.25		ug/L		109	70 - 130	3	20
Chlorobenzene	25.0	24.72		ug/L		99	70 - 130	3	20
Chlorobromomethane	25.0	25.75		ug/L		103	70 - 130	2	20
Chlorodibromomethane	25.0	23.95		ug/L		96	70 - 130	1	20
Chloroethane	25.0	23.73		ug/L		95	70 - 130	8	20
Chloroform	25.0	26.23		ug/L		105	70 - 130	1	20
Chloromethane	25.0	26.30		ug/L		105	70 - 130	1	20
cis-1,2-Dichloroethene	25.0	25.36		ug/L		101	70 - 130	4	20
cis-1,3-Dichloropropene	25.0	27.66		ug/L		111	70 - 130	3	20
Dichlorobromomethane	25.0	27.08		ug/L		108	70 - 130	1	20
Dichlorodifluoromethane	50.0	59.85		ug/L		120	70 - 130	4	20
Ethyl ether	25.0	25.91		ug/L		104	70 - 130	0	20
Ethylbenzene	25.0	24.56		ug/L		98	70 - 130	5	20
Ethylene Dibromide	25.0	26.08		ug/L		104	70 - 130	3	20
Hexachlorobutadiene	25.0	26.30		ug/L		105	70 - 130	4	20
Isopropyl ether	25.0	27.74		ug/L		111	70 - 130	1	20
Isopropylbenzene	25.0	24.24		ug/L		97	70 - 130	6	20
Methyl tert-butyl ether	25.0	26.18		ug/L		105	70 - 130	2	20
Methylene Chloride	25.0	24.58		ug/L		98	70 - 130	2	20
m-Xylene & p-Xylene	50.0	49.43		ug/L		99	70 - 130	5	20
Naphthalene	25.0	27.21		ug/L		109	70 - 130	1	20
n-Butylbenzene	25.0	26.39		ug/L		106	70 - 130	5	20
N-Propylbenzene	25.0	25.19		ug/L		101	70 - 130	5	20
o-Xylene	25.0	24.77		ug/L		99	70 - 130	4	20
sec-Butylbenzene	25.0	25.33		ug/L		101	70 - 130	7	20
Styrene	25.0	25.39		ug/L		102	70 - 130	4	20
Tert-amyl methyl ether	25.0	25.28		ug/L		101	70 - 130	0	20
Tert-butyl ethyl ether	25.0	26.77		ug/L		107	70 - 130	1	20
tert-Butylbenzene	25.0	24.66		ug/L		99	70 - 130	7	20
Tetrachloroethene	25.0	26.86		ug/L		107	70 - 130	5	20
Tetrahydrofuran	125	126.1		ug/L		101	70 - 130	0	20
Toluene	25.0	23.93		ug/L		96	70 - 130	6	20
trans-1,2-Dichloroethene	25.0	24.95		ug/L		100	70 - 130	4	20
trans-1,3-Dichloropropene	25.0	27.62		ug/L		110	70 - 130	0	20
Trichloroethene	25.0	25.76		ug/L		103	70 - 130	2	20
Trichlorofluoromethane	25.0	28.16		ug/L		113	70 - 130	5	20
Vinyl chloride	25.0	26.58		ug/L		106	70 - 130	1	20
Dibromomethane	25.0	26.04		ug/L		104	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	110		70 - 130
4-Bromofluorobenzene (Surr)	103		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-139971/35

Matrix: Solid

Analysis Batch: 139971

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.00250		0.00250	0.000500	mg/Kg			09/19/13 13:00	1
1,1,1-Trichloroethane	<0.00250		0.00250	0.000363	mg/Kg			09/19/13 13:00	1
1,1,2,2-Tetrachloroethane	<0.00250		0.00250	0.000811	mg/Kg			09/19/13 13:00	1
1,1,2-Trichloroethane	<0.00250		0.00250	0.000650	mg/Kg			09/19/13 13:00	1
1,1-Dichloroethane	<0.00250		0.00250	0.000610	mg/Kg			09/19/13 13:00	1
1,1-Dichloroethene	<0.00250		0.00250	0.000612	mg/Kg			09/19/13 13:00	1
1,1-Dichloropropene	<0.00250		0.00250	0.000710	mg/Kg			09/19/13 13:00	1
1,2,3-Trichlorobenzene	<0.00250		0.00250	0.000531	mg/Kg			09/19/13 13:00	1
1,2,3-Trichloropropane	<0.00250		0.00250	0.000509	mg/Kg			09/19/13 13:00	1
1,2,4-Trichlorobenzene	<0.00250		0.00250	0.000304	mg/Kg			09/19/13 13:00	1
1,2,4-Trimethylbenzene	<0.00250		0.00250	0.000960	mg/Kg			09/19/13 13:00	1
1,2-Dibromo-3-Chloropropane	<0.0250		0.0250	0.00250	mg/Kg			09/19/13 13:00	1
1,2-Dichlorobenzene	<0.00250		0.00250	0.000391	mg/Kg			09/19/13 13:00	1
1,2-Dichloroethane	<0.00250		0.00250	0.000251	mg/Kg			09/19/13 13:00	1
1,2-Dichloropropane	<0.00250		0.00250	0.00250	mg/Kg			09/19/13 13:00	1
1,3,5-Trimethylbenzene	<0.00250		0.00250	0.000322	mg/Kg			09/19/13 13:00	1
1,3-Dichlorobenzene	<0.00250		0.00250	0.000257	mg/Kg			09/19/13 13:00	1
1,3-Dichloropropane	<0.00250		0.00250	0.000300	mg/Kg			09/19/13 13:00	1
1,4-Dichlorobenzene	<0.00250		0.00250	0.000700	mg/Kg			09/19/13 13:00	1
1,4-Dioxane	<0.250		0.250	0.0241	mg/Kg			09/19/13 13:00	1
2,2-Dichloropropane	<0.00250		0.00250	0.000850	mg/Kg			09/19/13 13:00	1
2-Butanone (MEK)	<0.0250		0.0250	0.00183	mg/Kg			09/19/13 13:00	1
2-Chlorotoluene	<0.00250		0.00250	0.000328	mg/Kg			09/19/13 13:00	1
2-Hexanone	<0.0250		0.0250	0.00250	mg/Kg			09/19/13 13:00	1
4-Chlorotoluene	<0.00250		0.00250	0.000590	mg/Kg			09/19/13 13:00	1
4-Isopropyltoluene	<0.00250		0.00250	0.000401	mg/Kg			09/19/13 13:00	1
4-Methyl-2-pentanone (MIBK)	<0.0250		0.0250	0.00164	mg/Kg			09/19/13 13:00	1
Acetone	<0.250		0.250	0.00421	mg/Kg			09/19/13 13:00	1
Benzene	<0.00250		0.00250	0.000245	mg/Kg			09/19/13 13:00	1
Bromobenzene	<0.00250		0.00250	0.000880	mg/Kg			09/19/13 13:00	1
Bromoform	<0.00250		0.00250	0.00250	mg/Kg			09/19/13 13:00	1
Bromomethane	<0.00500		0.00500	0.000450	mg/Kg			09/19/13 13:00	1
Carbon disulfide	<0.00250		0.00250	0.00250	mg/Kg			09/19/13 13:00	1
Carbon tetrachloride	<0.00250		0.00250	0.000484	mg/Kg			09/19/13 13:00	1
Chlorobenzene	<0.00250		0.00250	0.000660	mg/Kg			09/19/13 13:00	1
Chlorobromomethane	<0.00250		0.00250	0.000361	mg/Kg			09/19/13 13:00	1
Chlorodibromomethane	<0.00250		0.00250	0.000640	mg/Kg			09/19/13 13:00	1
Chloroethane	<0.00500		0.00500	0.00113	mg/Kg			09/19/13 13:00	1
Chloroform	<0.00250		0.00250	0.000309	mg/Kg			09/19/13 13:00	1
Chloromethane	<0.00500		0.00500	0.000302	mg/Kg			09/19/13 13:00	1
cis-1,2-Dichloroethene	<0.00250		0.00250	0.000640	mg/Kg			09/19/13 13:00	1
cis-1,3-Dichloropropene	<0.00250		0.00250	0.000720	mg/Kg			09/19/13 13:00	1
Dichlorobromomethane	<0.00250		0.00250	0.000670	mg/Kg			09/19/13 13:00	1
Dichlorodifluoromethane	<0.00500		0.00500	0.000413	mg/Kg			09/19/13 13:00	1
Ethyl ether	<0.00250		0.00250	0.00210	mg/Kg			09/19/13 13:00	1
Ethylbenzene	<0.00250		0.00250	0.000345	mg/Kg			09/19/13 13:00	1
Ethylene Dibromide	<0.00250		0.00250	0.000642	mg/Kg			09/19/13 13:00	1
Hexachlorobutadiene	<0.00250		0.00250	0.000586	mg/Kg			09/19/13 13:00	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-139971/35

Matrix: Solid

Analysis Batch: 139971

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.00250		0.00250	0.00250	mg/Kg			09/19/13 13:00	1
Isopropylbenzene	<0.00250		0.00250	0.000754	mg/Kg			09/19/13 13:00	1
Methyl tert-butyl ether	<0.00250		0.00250	0.000491	mg/Kg			09/19/13 13:00	1
Methylene Chloride	0.004234		0.00250	0.00230	mg/Kg			09/19/13 13:00	1
m-Xylene & p-Xylene	<0.00500		0.00500	0.000840	mg/Kg			09/19/13 13:00	1
Naphthalene	<0.0250		0.0250	0.000670	mg/Kg			09/19/13 13:00	1
n-Butylbenzene	<0.00250		0.00250	0.000435	mg/Kg			09/19/13 13:00	1
N-Propylbenzene	<0.00250		0.00250	0.000400	mg/Kg			09/19/13 13:00	1
o-Xylene	<0.00250		0.00250	0.000653	mg/Kg			09/19/13 13:00	1
sec-Butylbenzene	<0.00250		0.00250	0.000435	mg/Kg			09/19/13 13:00	1
Styrene	<0.00250		0.00250	0.000250	mg/Kg			09/19/13 13:00	1
Tert-amyl methyl ether	<0.00250		0.00250	0.00128	mg/Kg			09/19/13 13:00	1
Tert-butyl ethyl ether	<0.00250		0.00250	0.00220	mg/Kg			09/19/13 13:00	1
tert-Butylbenzene	<0.00250		0.00250	0.000520	mg/Kg			09/19/13 13:00	1
Tetrachloroethene	<0.00250		0.00250	0.000671	mg/Kg			09/19/13 13:00	1
Tetrahydrofuran	<0.0500		0.0500	0.00460	mg/Kg			09/19/13 13:00	1
Toluene	<0.00250		0.00250	0.000378	mg/Kg			09/19/13 13:00	1
trans-1,2-Dichloroethene	<0.00250		0.00250	0.000516	mg/Kg			09/19/13 13:00	1
trans-1,3-Dichloropropene	<0.00250		0.00250	0.00220	mg/Kg			09/19/13 13:00	1
Trichloroethene	<0.00250		0.00250	0.00110	mg/Kg			09/19/13 13:00	1
Trichlorofluoromethane	<0.00500		0.00500	0.000473	mg/Kg			09/19/13 13:00	1
Vinyl chloride	<0.00250		0.00250	0.000610	mg/Kg			09/19/13 13:00	1
Dibromomethane	<0.00250		0.00250	0.000515	mg/Kg			09/19/13 13:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		70 - 130		09/19/13 13:00	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 130		09/19/13 13:00	1
4-Bromofluorobenzene (Surr)	99		70 - 130		09/19/13 13:00	1

Lab Sample ID: LCS 480-139971/4

Matrix: Solid

Analysis Batch: 139971

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	0.0500	0.05878		mg/Kg		118	70 - 130
1,1,1-Trichloroethane	0.0500	0.05062		mg/Kg		101	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.04905		mg/Kg		98	70 - 130
1,1,2-Trichloroethane	0.0500	0.05006		mg/Kg		100	70 - 130
1,1-Dichloroethane	0.0500	0.04983		mg/Kg		100	70 - 130
1,1-Dichloroethene	0.0500	0.04982		mg/Kg		100	70 - 130
1,1-Dichloropropene	0.0500	0.04865		mg/Kg		97	70 - 130
1,2,3-Trichlorobenzene	0.0500	0.06023		mg/Kg		120	70 - 130
1,2,3-Trichloropropane	0.0500	0.05008		mg/Kg		100	70 - 130
1,2,4-Trichlorobenzene	0.0500	0.06005		mg/Kg		120	70 - 130
1,2,4-Trimethylbenzene	0.0500	0.05036		mg/Kg		101	70 - 130
1,2-Dibromo-3-Chloropropane	0.0500	0.04561		mg/Kg		91	70 - 130
1,2-Dichlorobenzene	0.0500	0.05205		mg/Kg		104	70 - 130
1,2-Dichloroethane	0.0500	0.04669		mg/Kg		93	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-139971/4

Matrix: Solid

Analysis Batch: 139971

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	0.0500	0.04863		mg/Kg		97	70 - 130
1,3,5-Trimethylbenzene	0.0500	0.05103		mg/Kg		102	70 - 130
1,3-Dichlorobenzene	0.0500	0.05174		mg/Kg		103	70 - 130
1,3-Dichloropropane	0.0500	0.04966		mg/Kg		99	70 - 130
1,4-Dichlorobenzene	0.0500	0.05003		mg/Kg		100	70 - 130
1,4-Dioxane	2.00	1.980		mg/Kg		99	70 - 130
2,2-Dichloropropane	0.0500	0.05122		mg/Kg		102	70 - 130
2-Butanone (MEK)	0.250	0.3109		mg/Kg		124	70 - 130
2-Chlorotoluene	0.0500	0.05249		mg/Kg		105	70 - 130
2-Hexanone	0.250	0.2359		mg/Kg		94	70 - 130
4-Chlorotoluene	0.0500	0.05167		mg/Kg		103	70 - 130
4-Isopropyltoluene	0.0500	0.05290		mg/Kg		106	70 - 130
4-Methyl-2-pentanone (MIBK)	0.250	0.2382		mg/Kg		95	70 - 130
Acetone	0.250	0.2561		mg/Kg		102	70 - 130
Benzene	0.0500	0.04854		mg/Kg		97	70 - 130
Bromobenzene	0.0500	0.05086		mg/Kg		102	70 - 130
Bromoform	0.0500	0.04817		mg/Kg		96	70 - 130
Bromomethane	0.0500	0.04636		mg/Kg		93	70 - 130
Carbon disulfide	0.0500	0.06350		mg/Kg		127	70 - 130
Carbon tetrachloride	0.0500	0.05376		mg/Kg		108	70 - 130
Chlorobenzene	0.0500	0.05244		mg/Kg		105	70 - 130
Chlorobromomethane	0.0500	0.05202		mg/Kg		104	70 - 130
Chlorodibromomethane	0.0500	0.04993		mg/Kg		100	70 - 130
Chloroethane	0.0500	0.04743		mg/Kg		95	70 - 130
Chloroform	0.0500	0.04853		mg/Kg		97	70 - 130
Chloromethane	0.0500	0.04254		mg/Kg		85	70 - 130
cis-1,2-Dichloroethene	0.0500	0.05020		mg/Kg		100	70 - 130
cis-1,3-Dichloropropene	0.0500	0.05270		mg/Kg		105	70 - 130
Dichlorobromomethane	0.0500	0.05325		mg/Kg		106	70 - 130
Dichlorodifluoromethane	0.100	0.1049		mg/Kg		105	70 - 130
Ethyl ether	0.0500	0.04465		mg/Kg		89	70 - 130
Ethylbenzene	0.0500	0.05209		mg/Kg		104	70 - 130
Ethylene Dibromide	0.0500	0.05248		mg/Kg		105	70 - 130
Hexachlorobutadiene	0.0500	0.05567		mg/Kg		111	70 - 130
Isopropyl ether	0.0500	0.04746		mg/Kg		95	70 - 130
Isopropylbenzene	0.0500	0.05080		mg/Kg		102	70 - 130
Methyl tert-butyl ether	0.0500	0.04836		mg/Kg		97	70 - 130
Methylene Chloride	0.0500	0.04520		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.100	0.1050		mg/Kg		105	70 - 130
Naphthalene	0.0500	0.04989		mg/Kg		100	70 - 130
n-Butylbenzene	0.0500	0.05321		mg/Kg		106	70 - 130
N-Propylbenzene	0.0500	0.05063		mg/Kg		101	70 - 130
o-Xylene	0.0500	0.05330		mg/Kg		107	70 - 130
sec-Butylbenzene	0.0500	0.05154		mg/Kg		103	70 - 130
Styrene	0.0500	0.05370		mg/Kg		107	70 - 130
Tert-amyl methyl ether	0.0500	0.04918		mg/Kg		98	70 - 130
Tert-butyl ethyl ether	0.0500	0.04789		mg/Kg		96	70 - 130
tert-Butylbenzene	0.0500	0.05209		mg/Kg		104	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-139971/4

Matrix: Solid

Analysis Batch: 139971

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	0.0500	0.05936		mg/Kg		119	70 - 130
Tetrahydrofuran	0.250	0.2192		mg/Kg		88	70 - 130
Toluene	0.0500	0.05100		mg/Kg		102	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05336		mg/Kg		107	70 - 130
trans-1,3-Dichloropropene	0.0500	0.05396		mg/Kg		108	70 - 130
Trichloroethene	0.0500	0.05084		mg/Kg		102	70 - 130
Trichlorofluoromethane	0.0500	0.05122		mg/Kg		102	70 - 130
Vinyl chloride	0.0500	0.04794		mg/Kg		96	70 - 130
Dibromomethane	0.0500	0.04991		mg/Kg		100	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	95		70 - 130
4-Bromofluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 480-139971/6

Matrix: Solid

Analysis Batch: 139971

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	0.0500	0.05801		mg/Kg		116	70 - 130	1	20
1,1,1-Trichloroethane	0.0500	0.05027		mg/Kg		101	70 - 130	1	20
1,1,2,2-Tetrachloroethane	0.0500	0.05289		mg/Kg		106	70 - 130	8	20
1,1,2-Trichloroethane	0.0500	0.05242		mg/Kg		105	70 - 130	5	20
1,1-Dichloroethane	0.0500	0.04929		mg/Kg		99	70 - 130	1	20
1,1-Dichloroethene	0.0500	0.04922		mg/Kg		98	70 - 130	1	20
1,1-Dichloropropene	0.0500	0.04876		mg/Kg		98	70 - 130	0	20
1,2,3-Trichlorobenzene	0.0500	0.06141		mg/Kg		123	70 - 130	2	20
1,2,3-Trichloropropane	0.0500	0.05515		mg/Kg		110	70 - 130	10	20
1,2,4-Trichlorobenzene	0.0500	0.05996		mg/Kg		120	70 - 130	0	20
1,2,4-Trimethylbenzene	0.0500	0.05011		mg/Kg		100	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	0.0500	0.04977		mg/Kg		100	70 - 130	9	20
1,2-Dichlorobenzene	0.0500	0.05250		mg/Kg		105	70 - 130	1	20
1,2-Dichloroethane	0.0500	0.04745		mg/Kg		95	70 - 130	2	20
1,2-Dichloropropane	0.0500	0.04869		mg/Kg		97	70 - 130	0	20
1,3,5-Trimethylbenzene	0.0500	0.05010		mg/Kg		100	70 - 130	2	20
1,3-Dichlorobenzene	0.0500	0.05150		mg/Kg		103	70 - 130	0	20
1,3-Dichloropropane	0.0500	0.05126		mg/Kg		103	70 - 130	3	20
1,4-Dichlorobenzene	0.0500	0.05037		mg/Kg		101	70 - 130	1	20
1,4-Dioxane	2.00	2.471	*	mg/Kg		124	70 - 130	22	20
2,2-Dichloropropane	0.0500	0.04987		mg/Kg		100	70 - 130	3	20
2-Butanone (MEK)	0.250	0.3505	*	mg/Kg		140	70 - 130	12	20
2-Chlorotoluene	0.0500	0.05179		mg/Kg		104	70 - 130	1	20
2-Hexanone	0.250	0.2640		mg/Kg		106	70 - 130	11	20
4-Chlorotoluene	0.0500	0.05561		mg/Kg		111	70 - 130	7	20
4-Isopropyltoluene	0.0500	0.05219		mg/Kg		104	70 - 130	1	20
4-Methyl-2-pentanone (MIBK)	0.250	0.2641		mg/Kg		106	70 - 130	10	20
Acetone	0.250	0.2598		mg/Kg		104	70 - 130	1	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-139971/6

Matrix: Solid

Analysis Batch: 139971

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0500	0.04774		mg/Kg		95	70 - 130	2	20
Bromobenzene	0.0500	0.05094		mg/Kg		102	70 - 130	0	20
Bromoform	0.0500	0.05075		mg/Kg		101	70 - 130	5	20
Bromomethane	0.0500	0.03849		mg/Kg		77	70 - 130	19	20
Carbon disulfide	0.0500	0.06167		mg/Kg		123	70 - 130	3	20
Carbon tetrachloride	0.0500	0.05244		mg/Kg		105	70 - 130	2	20
Chlorobenzene	0.0500	0.05160		mg/Kg		103	70 - 130	2	20
Chlorobromomethane	0.0500	0.05327		mg/Kg		107	70 - 130	2	20
Chlorodibromomethane	0.0500	0.05131		mg/Kg		103	70 - 130	3	20
Chloroethane	0.0500	0.04082		mg/Kg		82	70 - 130	15	20
Chloroform	0.0500	0.04832		mg/Kg		97	70 - 130	0	20
Chloromethane	0.0500	0.04164		mg/Kg		83	70 - 130	2	20
cis-1,2-Dichloroethene	0.0500	0.04974		mg/Kg		99	70 - 130	1	20
cis-1,3-Dichloropropene	0.0500	0.05287		mg/Kg		106	70 - 130	0	20
Dichlorobromomethane	0.0500	0.05395		mg/Kg		108	70 - 130	1	20
Dichlorodifluoromethane	0.100	0.1037		mg/Kg		104	70 - 130	1	20
Ethyl ether	0.0500	0.04915		mg/Kg		98	70 - 130	10	20
Ethylbenzene	0.0500	0.05082		mg/Kg		102	70 - 130	2	20
Ethylene Dibromide	0.0500	0.05438		mg/Kg		109	70 - 130	4	20
Hexachlorobutadiene	0.0500	0.05316		mg/Kg		106	70 - 130	5	20
Isopropyl ether	0.0500	0.04795		mg/Kg		96	70 - 130	1	20
Isopropylbenzene	0.0500	0.05009		mg/Kg		100	70 - 130	1	20
Methyl tert-butyl ether	0.0500	0.05064		mg/Kg		101	70 - 130	5	20
Methylene Chloride	0.0500	0.04473		mg/Kg		89	70 - 130	1	20
m-Xylene & p-Xylene	0.100	0.1035		mg/Kg		103	70 - 130	1	20
Naphthalene	0.0500	0.05416		mg/Kg		108	70 - 130	8	20
n-Butylbenzene	0.0500	0.05186		mg/Kg		104	70 - 130	3	20
N-Propylbenzene	0.0500	0.05021		mg/Kg		100	70 - 130	1	20
o-Xylene	0.0500	0.05240		mg/Kg		105	70 - 130	2	20
sec-Butylbenzene	0.0500	0.05045		mg/Kg		101	70 - 130	2	20
Styrene	0.0500	0.05300		mg/Kg		106	70 - 130	1	20
Tert-amyl methyl ether	0.0500	0.05123		mg/Kg		102	70 - 130	4	20
Tert-butyl ethyl ether	0.0500	0.04833		mg/Kg		97	70 - 130	1	20
tert-Butylbenzene	0.0500	0.05130		mg/Kg		103	70 - 130	2	20
Tetrachloroethene	0.0500	0.06039		mg/Kg		121	70 - 130	2	20
Tetrahydrofuran	0.250	0.2454		mg/Kg		98	70 - 130	11	20
Toluene	0.0500	0.05014		mg/Kg		100	70 - 130	2	20
trans-1,2-Dichloroethene	0.0500	0.05228		mg/Kg		105	70 - 130	2	20
trans-1,3-Dichloropropene	0.0500	0.05486		mg/Kg		110	70 - 130	2	20
Trichloroethene	0.0500	0.04948		mg/Kg		99	70 - 130	3	20
Trichlorofluoromethane	0.0500	0.04989		mg/Kg		100	70 - 130	3	20
Vinyl chloride	0.0500	0.04564		mg/Kg		91	70 - 130	5	20
Dibromomethane	0.0500	0.05170		mg/Kg		103	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	101		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 480-139702/1-A

Matrix: Solid

Analysis Batch: 139631

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<0.250		0.250	0.0100	mg/Kg		09/18/13 08:33	09/18/13 09:12	1
C9-C10 Aromatics	<0.250		0.250	0.0100	mg/Kg		09/18/13 08:33	09/18/13 09:12	1
C9-C12 Aliphatics (unadjusted)	<0.250		0.250	0.0100	mg/Kg		09/18/13 08:33	09/18/13 09:12	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	80		70 - 130				09/18/13 08:33	09/18/13 09:12	1
2,5-Dibromotoluene (pid)	89		70 - 130				09/18/13 08:33	09/18/13 09:12	1

Lab Sample ID: MB 480-139702/1-A

Matrix: Solid

Analysis Batch: 139888

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<0.250		0.250	0.0100	mg/Kg		09/18/13 08:33	09/19/13 10:16	1
C9-C10 Aromatics	<0.250		0.250	0.0100	mg/Kg		09/18/13 08:33	09/19/13 10:16	1
C9-C12 Aliphatics (unadjusted)	<0.250		0.250	0.0100	mg/Kg		09/18/13 08:33	09/19/13 10:16	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	81		70 - 130				09/18/13 08:33	09/19/13 10:16	1
2,5-Dibromotoluene (pid)	89		70 - 130				09/18/13 08:33	09/19/13 10:16	1

Lab Sample ID: MB 480-139702/1-A

Matrix: Solid

Analysis Batch: 140221

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139702

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<0.250		0.250	0.0100	mg/Kg		09/18/13 08:33	09/21/13 09:22	1
C9-C10 Aromatics	<0.250		0.250	0.0100	mg/Kg		09/18/13 08:33	09/21/13 09:22	1
C9-C12 Aliphatics (unadjusted)	<0.250		0.250	0.0100	mg/Kg		09/18/13 08:33	09/21/13 09:22	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	98		70 - 130				09/18/13 08:33	09/21/13 09:22	1
2,5-Dibromotoluene (pid)	98		70 - 130				09/18/13 08:33	09/21/13 09:22	1

Lab Sample ID: LCS 480-139702/2-A

Matrix: Solid

Analysis Batch: 139631

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139702

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C5-C8 Aliphatics (unadjusted)	0.750	0.7915		mg/Kg		106	70 - 130
C9-C10 Aromatics	0.250	0.2413	J	mg/Kg		97	70 - 130
C9-C12 Aliphatics (unadjusted)	0.750	0.7171		mg/Kg		96	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
2,5-Dibromotoluene (fid)	80		70 - 130				
2,5-Dibromotoluene (pid)	88		70 - 130				

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCS 480-139702/2-A

Matrix: Solid

Analysis Batch: 139888

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139702

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C5-C8 Aliphatics (unadjusted)	0.750	0.8982		mg/Kg		120	70 - 130
C9-C10 Aromatics	0.250	0.2652		mg/Kg		106	70 - 130
C9-C12 Aliphatics (unadjusted)	0.750	0.8040		mg/Kg		107	70 - 130
Surrogate	%Recovery	LCS Qualifier	LCS	Limits			
2,5-Dibromotoluene (fid)	80			70 - 130			
2,5-Dibromotoluene (pid)	87			70 - 130			

Lab Sample ID: LCS 480-139702/2-A

Matrix: Solid

Analysis Batch: 140221

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139702

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C5-C8 Aliphatics (unadjusted)	0.750	0.7728		mg/Kg		103	70 - 130
C9-C10 Aromatics	0.250	0.2542		mg/Kg		102	70 - 130
C9-C12 Aliphatics (unadjusted)	0.750	0.7864		mg/Kg		105	70 - 130
Surrogate	%Recovery	LCS Qualifier	LCS	Limits			
2,5-Dibromotoluene (fid)	98			70 - 130			
2,5-Dibromotoluene (pid)	97			70 - 130			

Lab Sample ID: LCSD 480-139702/3-A

Matrix: Solid

Analysis Batch: 139631

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139702

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C5-C8 Aliphatics (unadjusted)	0.750	0.7771		mg/Kg		104	70 - 130	2	25
C9-C10 Aromatics	0.250	0.2341	J	mg/Kg		94	70 - 130	3	25
C9-C12 Aliphatics (unadjusted)	0.750	0.7085		mg/Kg		94	70 - 130	1	25
Surrogate	%Recovery	LCSD Qualifier	LCSD	Limits					
2,5-Dibromotoluene (fid)	79			70 - 130					
2,5-Dibromotoluene (pid)	86			70 - 130					

Lab Sample ID: LCSD 480-139702/3-A

Matrix: Solid

Analysis Batch: 139888

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139702

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C5-C8 Aliphatics (unadjusted)	0.750	0.8508		mg/Kg		113	70 - 130	5	25
C9-C10 Aromatics	0.250	0.2564		mg/Kg		103	70 - 130	3	25
C9-C12 Aliphatics (unadjusted)	0.750	0.7791		mg/Kg		104	70 - 130	3	25
Surrogate	%Recovery	LCSD Qualifier	LCSD	Limits					
2,5-Dibromotoluene (fid)	77			70 - 130					
2,5-Dibromotoluene (pid)	84			70 - 130					

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCSD 480-139702/3-A

Matrix: Solid

Analysis Batch: 140221

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139702

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C5-C8 Aliphatics (unadjusted)	0.750	0.7577		mg/Kg		101	70 - 130	2	25
C9-C10 Aromatics	0.250	0.2487	J	mg/Kg		99	70 - 130	2	25
C9-C12 Aliphatics (unadjusted)	0.750	0.7712		mg/Kg		103	70 - 130	2	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,5-Dibromotoluene (fid)	95		70 - 130
2,5-Dibromotoluene (pid)	95		70 - 130

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 480-139607/1-B

Matrix: Solid

Analysis Batch: 139854

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139607

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.497		0.497	0.0805	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Acenaphthylene	<0.497		0.497	0.0895	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Anthracene	<0.497		0.497	0.0944	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Benzo[a]anthracene	<0.497		0.497	0.0755	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Benzo[a]pyrene	<0.497		0.497	0.0716	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Benzo[b]fluoranthene	<0.497		0.497	0.0706	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Benzo[g,h,i]perylene	0.2592	J	0.497	0.0845	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Benzo[k]fluoranthene	<0.497		0.497	0.0726	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
2-Methylnaphthalene	<0.497		0.497	0.0974	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Chrysene	<0.497		0.497	0.0885	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Dibenz(a,h)anthracene	0.07151	J	0.497	0.0696	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Fluoranthene	<0.497		0.497	0.0875	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Fluorene	<0.497		0.497	0.0994	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Indeno[1,2,3-cd]pyrene	0.1014	J	0.497	0.0726	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Naphthalene	<0.497		0.497	0.0835	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Phenanthrene	0.2009	J	0.497	0.0994	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
Pyrene	<0.497		0.497	0.0905	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
C11-C22 Aromatics (unadjusted)	2.536	J	4.97	1.99	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
C19-C36 Aliphatics	<4.97		4.97	1.99	mg/Kg		09/18/13 05:21	09/19/13 02:30	1
C9-C18 Aliphatics	<4.97		4.97	1.99	mg/Kg		09/18/13 05:21	09/19/13 02:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	70		40 - 140	09/18/13 05:21	09/19/13 02:30	1
2-Bromonaphthalene	88		40 - 140	09/18/13 05:21	09/19/13 02:30	1
2-Fluorobiphenyl	106		40 - 140	09/18/13 05:21	09/19/13 02:30	1
o-Terphenyl	80		40 - 140	09/18/13 05:21	09/19/13 02:30	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCS 480-139607/2-B

Matrix: Solid

Analysis Batch: 139854

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139607

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	4.96	3.980		mg/Kg		80	40 - 140
Acenaphthylene	4.96	4.088		mg/Kg		82	40 - 140
Anthracene	4.96	4.328		mg/Kg		87	40 - 140
Benzo[a]anthracene	4.96	4.167		mg/Kg		84	40 - 140
Benzo[a]pyrene	4.96	4.177		mg/Kg		84	40 - 140
Benzo[b]fluoranthene	4.96	4.128		mg/Kg		83	40 - 140
Benzo[g,h,i]perylene	4.96	3.074		mg/Kg		62	40 - 140
Benzo[k]fluoranthene	4.96	4.177		mg/Kg		84	40 - 140
2-Methylnaphthalene	4.96	3.891		mg/Kg		78	40 - 140
Chrysene	4.96	4.228		mg/Kg		85	40 - 140
Dibenz(a,h)anthracene	4.96	3.781		mg/Kg		76	40 - 140
Fluoranthene	4.96	4.154		mg/Kg		84	40 - 140
Fluorene	4.96	4.273		mg/Kg		86	40 - 140
Indeno[1,2,3-cd]pyrene	4.96	3.401		mg/Kg		69	40 - 140
Naphthalene	4.96	3.627		mg/Kg		73	40 - 140
Phenanthrene	4.96	4.363		mg/Kg		88	40 - 140
Pyrene	4.96	4.236		mg/Kg		85	40 - 140
C11-C22 Aromatics (unadjusted)	84.3	67.04		mg/Kg		80	40 - 140
C19-C36 Aliphatics	39.7	24.10		mg/Kg		61	40 - 140
C9-C18 Aliphatics	29.8	17.48		mg/Kg		59	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	67		40 - 140
2-Bromonaphthalene	101		40 - 140
2-Fluorobiphenyl	119		40 - 140
o-Terphenyl	82		40 - 140

Lab Sample ID: LCSD 480-139607/3-B

Matrix: Solid

Analysis Batch: 139854

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139607

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	4.92	4.128		mg/Kg		84	40 - 140	4	25
Acenaphthylene	4.92	4.381		mg/Kg		89	40 - 140	7	25
Anthracene	4.92	4.611		mg/Kg		94	40 - 140	6	25
Benzo[a]anthracene	4.92	4.396		mg/Kg		89	40 - 140	5	25
Benzo[a]pyrene	4.92	4.408		mg/Kg		90	40 - 140	5	25
Benzo[b]fluoranthene	4.92	4.393		mg/Kg		89	40 - 140	6	25
Benzo[g,h,i]perylene	4.92	3.344		mg/Kg		68	40 - 140	8	25
Benzo[k]fluoranthene	4.92	4.396		mg/Kg		89	40 - 140	5	25
2-Methylnaphthalene	4.92	4.024		mg/Kg		82	40 - 140	3	25
Chrysene	4.92	4.454		mg/Kg		90	40 - 140	5	25
Dibenz(a,h)anthracene	4.92	4.001		mg/Kg		81	40 - 140	6	25
Fluoranthene	4.92	4.397		mg/Kg		89	40 - 140	6	25
Fluorene	4.92	4.583		mg/Kg		93	40 - 140	7	25
Indeno[1,2,3-cd]pyrene	4.92	3.615		mg/Kg		73	40 - 140	6	25
Naphthalene	4.92	3.782		mg/Kg		77	40 - 140	4	25
Phenanthrene	4.92	4.653		mg/Kg		95	40 - 140	6	25

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCSD 480-139607/3-B

Matrix: Solid

Analysis Batch: 139854

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139607

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pyrene	4.92	4.479		mg/Kg		91	40 - 140	6	25
C11-C22 Aromatics (unadjusted)	83.7	70.63		mg/Kg		84	40 - 140	5	25
C19-C36 Aliphatics	39.4	25.41		mg/Kg		65	40 - 140	5	25
C9-C18 Aliphatics	29.5	19.98		mg/Kg		68	40 - 140	13	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctadecane	71		40 - 140
2-Bromonaphthalene	95		40 - 140
2-Fluorobiphenyl	113		40 - 140
o-Terphenyl	85		40 - 140

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-139642/1-A

Matrix: Solid

Analysis Batch: 139953

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139642

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<1.05		1.05	0.418	mg/Kg		09/18/13 10:50	09/18/13 22:35	1
Barium	<0.523		0.523	0.115	mg/Kg		09/18/13 10:50	09/18/13 22:35	1
Cadmium	<0.209		0.209	0.0314	mg/Kg		09/18/13 10:50	09/18/13 22:35	1
Chromium	<0.523		0.523	0.209	mg/Kg		09/18/13 10:50	09/18/13 22:35	1
Silver	<0.523		0.523	0.209	mg/Kg		09/18/13 10:50	09/18/13 22:35	1
Lead	<0.523 ^		0.523	0.251	mg/Kg		09/18/13 10:50	09/18/13 22:35	1
Selenium	<0.523		0.523	0.418	mg/Kg		09/18/13 10:50	09/18/13 22:35	1
Antimony	<0.523 ^		0.523	0.418	mg/Kg		09/18/13 10:50	09/18/13 22:35	1
Beryllium	<0.209		0.209	0.0293	mg/Kg		09/18/13 10:50	09/18/13 22:35	1
Thallium	<1.05		1.05	0.314	mg/Kg		09/18/13 10:50	09/18/13 22:35	1
Nickel	<1.05		1.05	0.241	mg/Kg		09/18/13 10:50	09/18/13 22:35	1
Vanadium	<0.523		0.523	0.115	mg/Kg		09/18/13 10:50	09/18/13 22:35	1
Zinc	1.052 J		2.61	0.160	mg/Kg		09/18/13 10:50	09/18/13 22:35	1

Lab Sample ID: LCDSRM 480-139642/3-A LCDSRM

Matrix: Solid

Analysis Batch: 139953

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139642

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	182	181.6		mg/Kg		100.0	70.9 - 129.7	5	20
Barium	143	133.5		mg/Kg		93.6	72.7 - 128.0	2	20
Cadmium	60.2	58.06		mg/Kg		96.4	73.2 - 129.3	7	20
Chromium	125	119.4		mg/Kg		95.8	69.8 - 129.6	7	20
Silver	61.1	59.62		mg/Kg		97.5	66.9 - 133.1	7	20
Lead	136	138.6 ^		mg/Kg		102.2	73.1 - 127.2	7	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-139642/3-A LCDSRM

Matrix: Solid

Analysis Batch: 139953

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139642

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium	85.7	86.82		mg/Kg		101.3	63.9 - 136.2	5	20
Antimony	106	60.86	^	mg/Kg		57.6	23.1 - 255.7	20	20
Beryllium	98.0	96.19		mg/Kg		98.1	74.6 - 125.1	6	20
Thallium	144	149.8		mg/Kg		104.3	68.3 - 131.9	6	20
Nickel	128	135.0		mg/Kg		105.8	73.1 - 129.7	8	20
Vanadium	104	97.57		mg/Kg		94.1	66.0 - 133.7	7	20
Zinc	203	194.6		mg/Kg		95.7	69.6 - 129.9	7	20

Lab Sample ID: LCSSRM 480-139642/2-A

Matrix: Solid

Analysis Batch: 139953

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139642

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	182	172.4		mg/Kg		94.7	70.9 - 129.7		
Barium	143	131.2		mg/Kg		91.8	72.7 - 128.0		
Cadmium	60.4	53.89		mg/Kg		89.2	73.2 - 129.3		
Chromium	125	111.1		mg/Kg		88.9	69.8 - 129.6		
Silver	61.3	55.83		mg/Kg		91.1	66.9 - 133.1		
Lead	136	129.2	^	mg/Kg		95.0	73.1 - 127.2		
Selenium	85.9	82.64		mg/Kg		96.2	63.9 - 136.2		
Antimony	106	49.65	^	mg/Kg		46.8	23.1 - 255.7		
Beryllium	98.3	90.30		mg/Kg		91.9	74.6 - 125.1		
Thallium	144	140.8		mg/Kg		97.8	68.3 - 131.9		
Nickel	128	125.2		mg/Kg		97.8	73.1 - 129.7		
Vanadium	104	90.76		mg/Kg		87.3	66.0 - 133.7		
Zinc	204	181.0		mg/Kg		88.7	69.6 - 129.9		

Lab Sample ID: 480-45969-5 MS

Matrix: Solid

Analysis Batch: 139953

Client Sample ID: WCSS-16-(0-0.25) MS

Prep Type: Total/NA

Prep Batch: 139642

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.12		46.5	43.45		mg/Kg	☼	85	75 - 125		
Barium	101		46.5	123.8	F	mg/Kg	☼	49	75 - 125		

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: 480-45969-5 MS

Matrix: Solid

Analysis Batch: 139953

Client Sample ID: WCSS-16-(0-0.25) MS

Prep Type: Total/NA

Prep Batch: 139642

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	2.34		46.5	40.50		mg/Kg	✱	82	75 - 125
Chromium	41.7		46.5	70.68	F	mg/Kg	✱	62	75 - 125
Silver	<0.547		11.6	10.32		mg/Kg	✱	89	75 - 125
Lead	484	^	46.5	487.3	^ 4	mg/Kg	✱	7	75 - 125
Selenium	1.16		46.5	39.98		mg/Kg	✱	84	75 - 125
Antimony	2.50	^	46.5	39.52	^	mg/Kg	✱	80	75 - 125
Beryllium	0.543		46.5	38.77		mg/Kg	✱	82	75 - 125
Thallium	<1.09		46.5	41.26		mg/Kg	✱	89	75 - 125
Nickel	50.5		46.5	90.56		mg/Kg	✱	86	75 - 125
Vanadium	19.2		46.5	56.52		mg/Kg	✱	80	75 - 125
Zinc	957	B	46.5	925.2	4	mg/Kg	✱	-68	75 - 125

Lab Sample ID: 480-45969-5 MSD

Matrix: Solid

Analysis Batch: 139953

Client Sample ID: WCSS-16-(0-0.25) MSD

Prep Type: Total/NA

Prep Batch: 139642

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.12		39.8	42.38		mg/Kg	✱	96	75 - 125	2	35
Barium	101		39.8	159.2	F	mg/Kg	✱	146	75 - 125	25	35
Cadmium	2.34		39.8	38.57		mg/Kg	✱	91	75 - 125	5	35
Chromium	41.7		39.8	76.82		mg/Kg	✱	88	75 - 125	8	35
Silver	<0.547		9.95	10.16		mg/Kg	✱	102	75 - 125	2	35
Lead	484	^	39.8	617.4	^ 4	mg/Kg	✱	335	75 - 125	24	35
Selenium	1.16		39.8	38.41		mg/Kg	✱	94	75 - 125	4	35
Antimony	2.50	^	39.8	35.94	^	mg/Kg	✱	84	75 - 125	9	35
Beryllium	0.543		39.8	36.52		mg/Kg	✱	90	75 - 125	6	35
Thallium	<1.09		39.8	39.32		mg/Kg	✱	99	75 - 125	5	35
Nickel	50.5		39.8	132.0	F	mg/Kg	✱	205	75 - 125	37	35
Vanadium	19.2		39.8	67.03		mg/Kg	✱	120	75 - 125	17	35
Zinc	957	B	39.8	1088	4	mg/Kg	✱	331	75 - 125	16	35

Lab Sample ID: MB 480-139644/1-A

Matrix: Solid

Analysis Batch: 139946

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139644

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<1.09		1.09	0.437	mg/Kg		09/18/13 10:50	09/18/13 23:41	1
Barium	<0.547		0.547	0.120	mg/Kg		09/18/13 10:50	09/18/13 23:41	1
Cadmium	<0.219		0.219	0.0328	mg/Kg		09/18/13 10:50	09/18/13 23:41	1
Chromium	<0.547		0.547	0.219	mg/Kg		09/18/13 10:50	09/18/13 23:41	1
Silver	<0.547		0.547	0.219	mg/Kg		09/18/13 10:50	09/18/13 23:41	1
Lead	<0.547	^	0.547	0.262	mg/Kg		09/18/13 10:50	09/18/13 23:41	1
Selenium	0.5750		0.547	0.437	mg/Kg		09/18/13 10:50	09/18/13 23:41	1
Antimony	<0.547	^	0.547	0.437	mg/Kg		09/18/13 10:50	09/18/13 23:41	1
Beryllium	<0.219		0.219	0.0306	mg/Kg		09/18/13 10:50	09/18/13 23:41	1
Thallium	<1.09		1.09	0.328	mg/Kg		09/18/13 10:50	09/18/13 23:41	1
Nickel	<1.09		1.09	0.251	mg/Kg		09/18/13 10:50	09/18/13 23:41	1
Vanadium	<0.547		0.547	0.120	mg/Kg		09/18/13 10:50	09/18/13 23:41	1
Zinc	0.5466	J	2.73	0.167	mg/Kg		09/18/13 10:50	09/18/13 23:41	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-139644/3-A LCDSRM

Matrix: Solid

Analysis Batch: 139946

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139644

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	182	186.6		mg/Kg		102.7	70.9 - 129.7	3	20
Barium	143	138.5		mg/Kg		97.0	72.7 - 128.0	4	20
Cadmium	60.3	58.33		mg/Kg		96.8	73.2 - 129.3	3	20
Chromium	125	124.9		mg/Kg		100.1	69.8 - 129.6	2	20
Silver	61.2	61.54		mg/Kg		100.6	66.9 - 133.1	2	20
Lead	136	143.2 ^		mg/Kg		105.5	73.1 - 127.2	4	20
Selenium	85.7	91.29		mg/Kg		106.5	63.9 - 136.2	1	20
Antimony	106	61.80 ^		mg/Kg		58.4	23.1 - 255.7	2	20
Beryllium	98.1	98.13		mg/Kg		100.0	74.6 - 125.1	3	20
Thallium	144	152.6		mg/Kg		106.2	68.3 - 131.9	4	20
Nickel	128	139.8		mg/Kg		109.5	73.1 - 129.7	2	20
Vanadium	104	102.0		mg/Kg		98.2	66.0 - 133.7	1	20
Zinc	204	203.8		mg/Kg		100.1	69.6 - 129.9	1	20

Lab Sample ID: LCSSRM 480-139644/2-A

Matrix: Solid

Analysis Batch: 139946

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139644

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	182	192.4		mg/Kg		105.7	70.9 - 129.7		
Barium	143	144.4		mg/Kg		101.0	72.7 - 128.0		
Cadmium	60.4	59.95		mg/Kg		99.3	73.2 - 129.3		
Chromium	125	127.2		mg/Kg		101.8	69.8 - 129.6		
Silver	61.3	63.05		mg/Kg		102.9	66.9 - 133.1		
Lead	136	148.9 ^		mg/Kg		109.5	73.1 - 127.2		
Selenium	85.9	92.11		mg/Kg		107.3	63.9 - 136.2		
Antimony	106	60.59 ^		mg/Kg		57.2	23.1 - 255.7		
Beryllium	98.3	101.4		mg/Kg		103.1	74.6 - 125.1		
Thallium	144	159.1		mg/Kg		110.5	68.3 - 131.9		
Nickel	128	143.3		mg/Kg		112.0	73.1 - 129.7		

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-139644/2-A

Matrix: Solid

Analysis Batch: 139946

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139644

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	104	103.5		mg/Kg		99.5	66.0 - 133.7
Zinc	204	205.5		mg/Kg		100.7	69.6 - 129.9

Lab Sample ID: 480-45969-34 MS

Matrix: Solid

Analysis Batch: 139946

Client Sample ID: WCSS-47-(0-0.25) MS

Prep Type: Total/NA

Prep Batch: 139644

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.10		38.9	38.25		mg/Kg	☼	93	75 - 125
Barium	13.6		38.9	52.14		mg/Kg	☼	99	75 - 125
Cadmium	0.209	J	38.9	34.86		mg/Kg	☼	89	75 - 125
Chromium	8.76		38.9	45.18		mg/Kg	☼	94	75 - 125
Silver	<0.527		9.72	9.163		mg/Kg	☼	94	75 - 125
Lead	61.4	^	38.9	95.99	^	mg/Kg	☼	89	75 - 125
Selenium	0.444	J B	38.9	36.65		mg/Kg	☼	93	75 - 125
Antimony	2.66	^	38.9	35.90	^	mg/Kg	☼	86	75 - 125
Beryllium	0.146	J	38.9	34.58		mg/Kg	☼	89	75 - 125
Thallium	<1.05		38.9	37.07		mg/Kg	☼	95	75 - 125
Nickel	6.08		38.9	44.42		mg/Kg	☼	99	75 - 125
Vanadium	11.5		38.9	50.56		mg/Kg	☼	100	75 - 125
Zinc	47.7	B	38.9	83.03		mg/Kg	☼	91	75 - 125

Lab Sample ID: 480-45969-34 MSD

Matrix: Solid

Analysis Batch: 139946

Client Sample ID: WCSS-47-(0-0.25) MSD

Prep Type: Total/NA

Prep Batch: 139644

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Arsenic	2.10		41.3	38.11		mg/Kg	☼	87	75 - 125	0	35
Barium	13.6		41.3	50.97		mg/Kg	☼	90	75 - 125	2	35
Cadmium	0.209	J	41.3	35.37		mg/Kg	☼	85	75 - 125	1	35
Chromium	8.76		41.3	43.93		mg/Kg	☼	85	75 - 125	3	35
Silver	<0.527		10.3	9.091		mg/Kg	☼	88	75 - 125	1	35
Lead	61.4	^	41.3	89.47	^ F	mg/Kg	☼	68	75 - 125	7	35
Selenium	0.444	J B	41.3	36.75		mg/Kg	☼	88	75 - 125	0	35
Antimony	2.66	^	41.3	35.29	^	mg/Kg	☼	79	75 - 125	2	35
Beryllium	0.146	J	41.3	34.57		mg/Kg	☼	83	75 - 125	0	35
Thallium	<1.05		41.3	37.25		mg/Kg	☼	90	75 - 125	0	35
Nickel	6.08		41.3	44.22		mg/Kg	☼	92	75 - 125	0	35
Vanadium	11.5		41.3	48.81		mg/Kg	☼	90	75 - 125	4	35
Zinc	47.7	B	41.3	78.38	F	mg/Kg	☼	74	75 - 125	6	35

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 480-139621/1-A

Matrix: Solid

Analysis Batch: 139797

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139621

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.100		0.100	0.00811	mg/Kg		09/18/13 08:00	09/18/13 12:20	1

Lab Sample ID: LCDSRM 480-139621/3-A LCDSRM

Matrix: Solid

Analysis Batch: 139797

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139621

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.77	3.148		mg/Kg		83.5	50.9 - 149.1	4	

Lab Sample ID: LCSSRM 480-139621/2-A

Matrix: Solid

Analysis Batch: 139797

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139621

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.77	3.283		mg/Kg		87.1	50.9 - 149.1		

Lab Sample ID: 480-45969-34 MS

Matrix: Solid

Analysis Batch: 139797

Client Sample ID: WCSS-47-(0-0.25) MS

Prep Type: Total/NA

Prep Batch: 139621

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.106		0.312	0.3897		mg/Kg	✱	91	75 - 125		

Lab Sample ID: 480-45969-34 MSD

Matrix: Solid

Analysis Batch: 139797

Client Sample ID: WCSS-47-(0-0.25) MSD

Prep Type: Total/NA

Prep Batch: 139621

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.106		0.308	0.4137		mg/Kg	✱	100	75 - 125	6	35

Lab Sample ID: MB 480-139623/1-A

Matrix: Solid

Analysis Batch: 139797

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139623

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0990		0.0990	0.00802	mg/Kg		09/18/13 08:00	09/18/13 11:15	1

Lab Sample ID: LCDSRM 480-139623/3-A LCDSRM

Matrix: Solid

Analysis Batch: 139797

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139623

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	3.77	3.047		mg/Kg		80.8	50.9 - 149.1	12	

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TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-139623/2-A
Matrix: Solid
Analysis Batch: 139797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 139623

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.77	3.425		mg/Kg		90.9	50.9 - 149.1

Lab Sample ID: 480-45969-5 MS
Matrix: Solid
Analysis Batch: 139797

Client Sample ID: WCSS-16-(0-0.25) MS
Prep Type: Total/NA
Prep Batch: 139623

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.868		0.335	1.501	F	mg/Kg	☼	189	75 - 125

Lab Sample ID: 480-45969-5 MSD
Matrix: Solid
Analysis Batch: 139797

Client Sample ID: WCSS-16-(0-0.25) MSD
Prep Type: Total/NA
Prep Batch: 139623

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.868		0.343	1.469	F	mg/Kg	☼	175	75 - 125	2	35

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

GC/MS VOA

Prep Batch: 139791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	5035	
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	5035	
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	5035	
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	5035	
LCS 480-139791/20-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 480-139791/21-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 480-139791/22-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 139838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-38	TB-09162013	Total/NA	Water	8260C	
LCS 480-139838/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-139838/5	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-139838/7	Method Blank	Total/NA	Water	8260C	

Prep Batch: 139957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	5035	
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	5035	
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	5035	
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	5035	
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	5035	
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	5035	
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	5035	
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	5035	

Analysis Batch: 139971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	8260C	139957
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	8260C	139957
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	8260C	139957
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	8260C	139957
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	8260C	139957
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	8260C	139957
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	8260C	139957
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	8260C	139957
LCS 480-139971/4	Lab Control Sample	Total/NA	Solid	8260C	
LCSD 480-139971/6	Lab Control Sample Dup	Total/NA	Solid	8260C	
MB 480-139971/35	Method Blank	Total/NA	Solid	8260C	

Analysis Batch: 140106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	8260C	139791
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	8260C	139791
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	8260C	139791
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	8260C	139791
LCS 480-139791/20-A	Lab Control Sample	Total/NA	Solid	8260C	139791
LCSD 480-139791/21-A	Lab Control Sample Dup	Total/NA	Solid	8260C	139791
MB 480-139791/22-A	Method Blank	Total/NA	Solid	8260C	139791

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

GC VOA

Analysis Batch: 139631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	MAVPH	139702
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	MAVPH	139702
LCS 480-139702/2-A	Lab Control Sample	Total/NA	Solid	MAVPH	139702
LCSD 480-139702/3-A	Lab Control Sample Dup	Total/NA	Solid	MAVPH	139702
MB 480-139702/1-A	Method Blank	Total/NA	Solid	MAVPH	139702

Prep Batch: 139702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	5035	
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	5035	
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	5035	
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	5035	
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	5035	
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	5035	
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	5035	
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	5035	
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	5035	
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	5035	
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	5035	
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	5035	
LCS 480-139702/2-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 480-139702/3-A	Lab Control Sample Dup	Total/NA	Solid	5035	
MB 480-139702/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 139888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	MAVPH	139702
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	MAVPH	139702
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	MAVPH	139702
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	MAVPH	139702
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	MAVPH	139702
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	MAVPH	139702
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	MAVPH	139702
LCS 480-139702/2-A	Lab Control Sample	Total/NA	Solid	MAVPH	139702
LCSD 480-139702/3-A	Lab Control Sample Dup	Total/NA	Solid	MAVPH	139702
MB 480-139702/1-A	Method Blank	Total/NA	Solid	MAVPH	139702

Analysis Batch: 140221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	MAVPH	139702
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	MAVPH	139702
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	MAVPH	139702
LCS 480-139702/2-A	Lab Control Sample	Total/NA	Solid	MAVPH	139702
LCSD 480-139702/3-A	Lab Control Sample Dup	Total/NA	Solid	MAVPH	139702
MB 480-139702/1-A	Method Blank	Total/NA	Solid	MAVPH	139702

Analysis Batch: 140681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	MA VPH	
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	MA VPH	
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	MA VPH	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

GC VOA (Continued)

Analysis Batch: 140681 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	MA VPH	
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	MA VPH	
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	MA VPH	
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	MA VPH	
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	MA VPH	
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	MA VPH	
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	MA VPH	
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	MA VPH	
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	MA VPH	

GC Semi VOA

Prep Batch: 139607

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	3546	
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	3546	
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	3546	
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	3546	
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	3546	
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	3546	
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	3546	
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	3546	
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	3546	
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	3546	
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	3546	
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	3546	
LCS 480-139607/2-B	Lab Control Sample	Total/NA	Solid	3546	
LCSD 480-139607/3-B	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 480-139607/1-B	Method Blank	Total/NA	Solid	3546	

Fraction Batch: 139639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	MA EPH Frac	139607
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	MA EPH Frac	139607
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	MA EPH Frac	139607
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	MA EPH Frac	139607
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	MA EPH Frac	139607
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	MA EPH Frac	139607
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	MA EPH Frac	139607
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	MA EPH Frac	139607
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	MA EPH Frac	139607
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	MA EPH Frac	139607
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	MA EPH Frac	139607
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	MA EPH Frac	139607
LCS 480-139607/2-B	Lab Control Sample	Total/NA	Solid	MA EPH Frac	139607
LCSD 480-139607/3-B	Lab Control Sample Dup	Total/NA	Solid	MA EPH Frac	139607
MB 480-139607/1-B	Method Blank	Total/NA	Solid	MA EPH Frac	139607

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

GC Semi VOA (Continued)

Analysis Batch: 139854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	MA-EPH	139639
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	MA-EPH	139639
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	MA-EPH	139639
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	MA-EPH	139639
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	MA-EPH	139639
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	MA-EPH	139639
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	MA-EPH	139639
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	MA-EPH	139639
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	MA-EPH	139639
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	MA-EPH	139639
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	MA-EPH	139639
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	MA-EPH	139639
LCS 480-139607/2-B	Lab Control Sample	Total/NA	Solid	MA-EPH	139639
LCSD 480-139607/3-B	Lab Control Sample Dup	Total/NA	Solid	MA-EPH	139639
MB 480-139607/1-B	Method Blank	Total/NA	Solid	MA-EPH	139639

Analysis Batch: 140245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	MA-EPH	
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	MA-EPH	
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	MA-EPH	
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	MA-EPH	
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	MA-EPH	
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	MA-EPH	
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	MA-EPH	
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	MA-EPH	
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	MA-EPH	
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	MA-EPH	
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	MA-EPH	
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	MA-EPH	

Metals

Prep Batch: 139621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-19	WCSS-30-(0-0.25)	Total/NA	Solid	7471A	
480-45969-20	WCSS-31-(0-0.25)	Total/NA	Solid	7471A	
480-45969-21	WCSS-32-(0-0.25)	Total/NA	Solid	7471A	
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	7471A	
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	7471A	
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	7471A	
480-45969-25	WCSS-36-(0-0.25)	Total/NA	Solid	7471A	
480-45969-26	WCSS-38-(0-0.25)	Total/NA	Solid	7471A	
480-45969-27	WCSS-39-(0-0.25)	Total/NA	Solid	7471A	
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	7471A	
480-45969-29	WCSS-41-(0-0.25)	Total/NA	Solid	7471A	
480-45969-30	WCSS-43-(0-0.25)	Total/NA	Solid	7471A	
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	7471A	
480-45969-32	WCSS-45-(0-0.25)	Total/NA	Solid	7471A	
480-45969-33	WCSS-46-(0-0.25)	Total/NA	Solid	7471A	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Metals (Continued)

Prep Batch: 139621 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-34	WCSS-47-(0-0.25)	Total/NA	Solid	7471A	
480-45969-34 MS	WCSS-47-(0-0.25) MS	Total/NA	Solid	7471A	
480-45969-34 MSD	WCSS-47-(0-0.25) MSD	Total/NA	Solid	7471A	
480-45969-35	WCSS-48-(0-0.25)	Total/NA	Solid	7471A	
LCDSRM 480-139621/3-A LCDSE	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-139621/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-139621/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 139623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-1	WCSS-11-(0-0.25)	Total/NA	Solid	7471A	
480-45969-2	WCSS-13-(0-0.25)	Total/NA	Solid	7471A	
480-45969-3	WCSS-14-(0-0.25)	Total/NA	Solid	7471A	
480-45969-4	WCSS-15-(0-0.25)	Total/NA	Solid	7471A	
480-45969-5	WCSS-16-(0-0.25)	Total/NA	Solid	7471A	
480-45969-5 MS	WCSS-16-(0-0.25) MS	Total/NA	Solid	7471A	
480-45969-5 MSD	WCSS-16-(0-0.25) MSD	Total/NA	Solid	7471A	
480-45969-6	WCSS-18-(0-0.25)	Total/NA	Solid	7471A	
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	7471A	
480-45969-8	WCSS-19-(0-0.25)	Total/NA	Solid	7471A	
480-45969-9	WCSS-20-(0-0.25)	Total/NA	Solid	7471A	
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	7471A	
480-45969-11	WCSS-22-(0-0.25)	Total/NA	Solid	7471A	
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	7471A	
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	7471A	
480-45969-14	WCSS-24-(0-0.25)	Total/NA	Solid	7471A	
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	7471A	
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	7471A	
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	7471A	
480-45969-18	WCSS-29-(0-0.25)	Total/NA	Solid	7471A	
LCDSRM 480-139623/3-A LCDSE	Lab Control Sample Dup	Total/NA	Solid	7471A	
LCSSRM 480-139623/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 480-139623/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 139642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-1	WCSS-11-(0-0.25)	Total/NA	Solid	3050B	
480-45969-2	WCSS-13-(0-0.25)	Total/NA	Solid	3050B	
480-45969-3	WCSS-14-(0-0.25)	Total/NA	Solid	3050B	
480-45969-4	WCSS-15-(0-0.25)	Total/NA	Solid	3050B	
480-45969-5	WCSS-16-(0-0.25)	Total/NA	Solid	3050B	
480-45969-5 MS	WCSS-16-(0-0.25) MS	Total/NA	Solid	3050B	
480-45969-5 MSD	WCSS-16-(0-0.25) MSD	Total/NA	Solid	3050B	
480-45969-6	WCSS-18-(0-0.25)	Total/NA	Solid	3050B	
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	3050B	
480-45969-8	WCSS-19-(0-0.25)	Total/NA	Solid	3050B	
480-45969-9	WCSS-20-(0-0.25)	Total/NA	Solid	3050B	
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	3050B	
480-45969-11	WCSS-22-(0-0.25)	Total/NA	Solid	3050B	
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	3050B	
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	3050B	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Metals (Continued)

Prep Batch: 139642 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-14	WCSS-24-(0-0.25)	Total/NA	Solid	3050B	
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	3050B	
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	3050B	
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	3050B	
480-45969-18	WCSS-29-(0-0.25)	Total/NA	Solid	3050B	
LCDSRM 480-139642/3-A LCDS	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-139642/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-139642/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 139644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-19	WCSS-30-(0-0.25)	Total/NA	Solid	3050B	
480-45969-20	WCSS-31-(0-0.25)	Total/NA	Solid	3050B	
480-45969-21	WCSS-32-(0-0.25)	Total/NA	Solid	3050B	
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	3050B	
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	3050B	
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	3050B	
480-45969-25	WCSS-36-(0-0.25)	Total/NA	Solid	3050B	
480-45969-26	WCSS-38-(0-0.25)	Total/NA	Solid	3050B	
480-45969-27	WCSS-39-(0-0.25)	Total/NA	Solid	3050B	
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	3050B	
480-45969-29	WCSS-41-(0-0.25)	Total/NA	Solid	3050B	
480-45969-30	WCSS-43-(0-0.25)	Total/NA	Solid	3050B	
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	3050B	
480-45969-32	WCSS-45-(0-0.25)	Total/NA	Solid	3050B	
480-45969-33	WCSS-46-(0-0.25)	Total/NA	Solid	3050B	
480-45969-34	WCSS-47-(0-0.25)	Total/NA	Solid	3050B	
480-45969-34 MS	WCSS-47-(0-0.25) MS	Total/NA	Solid	3050B	
480-45969-34 MSD	WCSS-47-(0-0.25) MSD	Total/NA	Solid	3050B	
480-45969-35	WCSS-48-(0-0.25)	Total/NA	Solid	3050B	
LCDSRM 480-139644/3-A LCDS	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-139644/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-139644/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 139797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-1	WCSS-11-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-2	WCSS-13-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-3	WCSS-14-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-4	WCSS-15-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-5	WCSS-16-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-5 MS	WCSS-16-(0-0.25) MS	Total/NA	Solid	7471A	139623
480-45969-5 MSD	WCSS-16-(0-0.25) MSD	Total/NA	Solid	7471A	139623
480-45969-6	WCSS-18-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-8	WCSS-19-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-9	WCSS-20-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-11	WCSS-22-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	7471A	139623

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Metals (Continued)

Analysis Batch: 139797 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-14	WCSS-24-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-18	WCSS-29-(0-0.25)	Total/NA	Solid	7471A	139623
480-45969-19	WCSS-30-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-20	WCSS-31-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-21	WCSS-32-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-25	WCSS-36-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-26	WCSS-38-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-27	WCSS-39-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-29	WCSS-41-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-30	WCSS-43-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-32	WCSS-45-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-33	WCSS-46-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-34	WCSS-47-(0-0.25)	Total/NA	Solid	7471A	139621
480-45969-34 MS	WCSS-47-(0-0.25) MS	Total/NA	Solid	7471A	139621
480-45969-34 MSD	WCSS-47-(0-0.25) MSD	Total/NA	Solid	7471A	139621
480-45969-35	WCSS-48-(0-0.25)	Total/NA	Solid	7471A	139621
LCDSRM 480-139621/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	7471A	139621
LCDSRM 480-139623/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	7471A	139623
LCSSRM 480-139621/2-A	Lab Control Sample	Total/NA	Solid	7471A	139621
LCSSRM 480-139623/2-A	Lab Control Sample	Total/NA	Solid	7471A	139623
MB 480-139621/1-A	Method Blank	Total/NA	Solid	7471A	139621
MB 480-139623/1-A	Method Blank	Total/NA	Solid	7471A	139623

Analysis Batch: 139946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-19	WCSS-30-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-20	WCSS-31-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-21	WCSS-32-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-25	WCSS-36-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-26	WCSS-38-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-27	WCSS-39-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-29	WCSS-41-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-30	WCSS-43-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-32	WCSS-45-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-33	WCSS-46-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-34	WCSS-47-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-34 MS	WCSS-47-(0-0.25) MS	Total/NA	Solid	6010	139644
480-45969-34 MSD	WCSS-47-(0-0.25) MSD	Total/NA	Solid	6010	139644

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Metals (Continued)

Analysis Batch: 139946 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-35	WCSS-48-(0-0.25)	Total/NA	Solid	6010	139644
LCDSRM 480-139644/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	6010	139644
LCSSRM 480-139644/2-A	Lab Control Sample	Total/NA	Solid	6010	139644
MB 480-139644/1-A	Method Blank	Total/NA	Solid	6010	139644

Analysis Batch: 139953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-1	WCSS-11-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-2	WCSS-13-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-3	WCSS-14-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-4	WCSS-15-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-5	WCSS-16-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-5 MS	WCSS-16-(0-0.25) MS	Total/NA	Solid	6010	139642
480-45969-5 MSD	WCSS-16-(0-0.25) MSD	Total/NA	Solid	6010	139642
480-45969-6	WCSS-18-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-8	WCSS-19-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-9	WCSS-20-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-11	WCSS-22-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-14	WCSS-24-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-18	WCSS-29-(0-0.25)	Total/NA	Solid	6010	139642
LCDSRM 480-139642/3-A LCD	Lab Control Sample Dup	Total/NA	Solid	6010	139642
LCSSRM 480-139642/2-A	Lab Control Sample	Total/NA	Solid	6010	139642
MB 480-139642/1-A	Method Blank	Total/NA	Solid	6010	139642

Analysis Batch: 140201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-1	WCSS-11-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-6	WCSS-18-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	6010	139642
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	6010	139642

Analysis Batch: 140202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-25	WCSS-36-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-29	WCSS-41-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	6010	139644
480-45969-33	WCSS-46-(0-0.25)	Total/NA	Solid	6010	139644

General Chemistry

Analysis Batch: 139842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-1	WCSS-11-(0-0.25)	Total/NA	Solid	Moisture	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

General Chemistry (Continued)

Analysis Batch: 139842 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-45969-2	WCSS-13-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-3	WCSS-14-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-4	WCSS-15-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-5	WCSS-16-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-5 MS	WCSS-16-(0-0.25) MS	Total/NA	Solid	Moisture	
480-45969-5 MSD	WCSS-16-(0-0.25) MSD	Total/NA	Solid	Moisture	
480-45969-6	WCSS-18-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-7	WCSS-17-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-8	WCSS-19-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-9	WCSS-20-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-10	WCSS-21-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-11	WCSS-22-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-12	WCSS-23-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-13	WCSS-25-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-14	WCSS-24-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-15	WCSS-26-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-16	WCSS-27-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-17	WCSS-28-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-18	WCSS-29-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-19	WCSS-30-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-20	WCSS-31-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-21	WCSS-32-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-22	WCSS-33-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-23	WCSS-34-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-24	WCSS-35-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-25	WCSS-36-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-26	WCSS-38-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-27	WCSS-39-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-28	WCSS-40-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-29	WCSS-41-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-30	WCSS-43-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-31	WCSS-44-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-32	WCSS-45-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-33	WCSS-46-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-34	WCSS-47-(0-0.25)	Total/NA	Solid	Moisture	
480-45969-34 MS	WCSS-47-(0-0.25) MS	Total/NA	Solid	Moisture	
480-45969-34 MSD	WCSS-47-(0-0.25) MSD	Total/NA	Solid	Moisture	
480-45969-35	WCSS-48-(0-0.25)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-11-(0-0.25)

Date Collected: 09/16/13 12:00

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-1

Matrix: Solid

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		5	139797	09/18/13 13:57	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 22:41	LMH	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		2	140201	09/19/13 15:05	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-13-(0-0.25)

Date Collected: 09/16/13 11:45

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-2

Matrix: Solid

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		100	139797	09/18/13 13:59	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 22:43	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-14-(0-0.25)

Date Collected: 09/16/13 11:50

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-3

Matrix: Solid

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		10	139797	09/18/13 14:00	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 22:46	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-15-(0-0.25)

Date Collected: 09/16/13 11:35

Date Received: 09/18/13 01:30

Lab Sample ID: 480-45969-4

Matrix: Solid

Percent Solids: 96.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 11:28	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 22:48	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-16-(0-0.25)

Lab Sample ID: 480-45969-5

Date Collected: 09/16/13 11:05

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		5	139797	09/18/13 14:02	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 22:50	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-18-(0-0.25)

Lab Sample ID: 480-45969-6

Date Collected: 09/16/13 11:00

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		100	139797	09/18/13 14:10	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:06	LMH	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		2	140201	09/19/13 15:07	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-17-(0-0.25)

Lab Sample ID: 480-45969-7

Date Collected: 09/16/13 12:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139957	09/19/13 09:47	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	139971	09/19/13 13:38	CDC	TAL BUF
Total/NA	Prep	5035			139702	09/18/13 08:33	CMD	TAL BUF
Total/NA	Analysis	MAVPH		5	139888	09/19/13 12:24	CMD	TAL BUF
Total/NA	Analysis	MA VPH		5	140681	09/23/13 14:26	GSR	TAL BUF
Total/NA	Prep	3546			139607	09/18/13 05:21	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			139639	09/18/13 08:08	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	139854	09/19/13 03:59	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	140245	09/20/13 10:00	DGB	TAL BUF
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 11:43	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:09	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-19-(0-0.25)

Lab Sample ID: 480-45969-8

Date Collected: 09/16/13 12:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 11:45	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:11	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-20-(0-0.25)

Lab Sample ID: 480-45969-9

Date Collected: 09/16/13 12:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 88.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		10	139797	09/18/13 14:11	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:13	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-21-(0-0.25)

Lab Sample ID: 480-45969-10

Date Collected: 09/16/13 11:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139957	09/19/13 09:47	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	139971	09/19/13 14:04	CDC	TAL BUF
Total/NA	Prep	5035			139702	09/18/13 08:33	CMD	TAL BUF
Total/NA	Analysis	MAVPH		1	139888	09/19/13 16:07	CMD	TAL BUF
Total/NA	Analysis	MA VPH		1	140681	09/23/13 14:26	GSR	TAL BUF
Total/NA	Prep	3546			139607	09/18/13 05:21	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	139854	09/19/13 04:28	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			139639	09/18/13 08:08	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	140245	09/20/13 10:00	DGB	TAL BUF
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		5	139797	09/18/13 14:13	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:16	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-22-(0-0.25)

Lab Sample ID: 480-45969-11

Date Collected: 09/16/13 10:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		10	139797	09/18/13 14:17	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:18	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-23-(0-0.25)

Lab Sample ID: 480-45969-12

Date Collected: 09/16/13 13:10

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139791	09/18/13 14:57	NQN	TAL BUF
Total/NA	Analysis	8260C		1	140106	09/20/13 01:48	LCH	TAL BUF
Total/NA	Prep	5035			139702	09/18/13 08:33	CMD	TAL BUF
Total/NA	Analysis	MAVPH		10	139631	09/18/13 15:05	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	140681	09/23/13 14:27	GSR	TAL BUF
Total/NA	Prep	3546			139607	09/18/13 05:21	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			139639	09/18/13 08:08	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	139854	09/19/13 04:58	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	140245	09/20/13 10:00	DGB	TAL BUF
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		20	139797	09/18/13 14:23	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:20	LMH	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		10	140201	09/19/13 15:10	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-25-(0-0.25)

Lab Sample ID: 480-45969-13

Date Collected: 09/16/13 13:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139957	09/19/13 09:47	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	139971	09/19/13 14:29	CDC	TAL BUF
Total/NA	Prep	5035			139702	09/18/13 08:33	CMD	TAL BUF
Total/NA	Analysis	MAVPH		5	139888	09/19/13 13:02	CMD	TAL BUF
Total/NA	Analysis	MA VPH		5	140681	09/23/13 14:26	GSR	TAL BUF
Total/NA	Analysis	MA-EPH		1	139854	09/19/13 05:27	DGB	TAL BUF
Total/NA	Prep	3546			139607	09/18/13 05:21	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			139639	09/18/13 08:08	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	140245	09/20/13 10:00	DGB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-25-(0-0.25)

Lab Sample ID: 480-45969-13

Date Collected: 09/16/13 13:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		10	139797	09/18/13 14:25	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:27	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-24-(0-0.25)

Lab Sample ID: 480-45969-14

Date Collected: 09/16/13 12:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		20	139797	09/18/13 14:27	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:30	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-26-(0-0.25)

Lab Sample ID: 480-45969-15

Date Collected: 09/16/13 14:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139791	09/18/13 14:57	NQN	TAL BUF
Total/NA	Analysis	8260C		2	140106	09/20/13 02:11	LCH	TAL BUF
Total/NA	Prep	5035			139702	09/18/13 08:33	CMD	TAL BUF
Total/NA	Analysis	MAVPH		5	139888	09/19/13 13:44	CMD	TAL BUF
Total/NA	Analysis	MA VPH		5	140681	09/23/13 14:26	GSR	TAL BUF
Total/NA	Prep	3546			139607	09/18/13 05:21	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			139639	09/18/13 08:08	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	139854	09/19/13 06:01	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	140245	09/20/13 10:00	DGB	TAL BUF
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 14:29	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:32	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-27-(0-0.25)

Lab Sample ID: 480-45969-16

Date Collected: 09/16/13 14:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139791	09/18/13 14:57	NQN	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-27-(0-0.25)

Lab Sample ID: 480-45969-16

Date Collected: 09/16/13 14:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	140106	09/20/13 02:35	LCH	TAL BUF
Total/NA	Prep	5035			139702	09/18/13 08:33	CMD	TAL BUF
Total/NA	Analysis	MAVPH		1	139888	09/19/13 16:46	CMD	TAL BUF
Total/NA	Analysis	MA VPH		1	140681	09/23/13 14:26	GSR	TAL BUF
Total/NA	Fraction	MA EPH Frac			139639	09/18/13 08:08	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	139854	09/19/13 06:30	DGB	TAL BUF
Total/NA	Prep	3546			139607	09/18/13 05:21	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	140245	09/20/13 10:00	DGB	TAL BUF
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 14:31	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:34	LMH	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		5	140201	09/19/13 15:17	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-28-(0-0.25)

Lab Sample ID: 480-45969-17

Date Collected: 09/16/13 13:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 93.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139957	09/19/13 09:47	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	139971	09/19/13 14:55	CDC	TAL BUF
Total/NA	Prep	5035			139702	09/18/13 08:33	CMD	TAL BUF
Total/NA	Analysis	MAVPH		10	139631	09/18/13 18:17	CMD	TAL BUF
Total/NA	Analysis	MA VPH		1	140681	09/23/13 14:27	GSR	TAL BUF
Total/NA	Prep	3546			139607	09/18/13 05:21	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	139854	09/19/13 07:00	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			139639	09/18/13 08:08	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	140245	09/20/13 10:00	DGB	TAL BUF
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 14:33	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:37	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-29-(0-0.25)

Lab Sample ID: 480-45969-18

Date Collected: 09/16/13 14:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139623	09/18/13 08:00	JRK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-29-(0-0.25)

Lab Sample ID: 480-45969-18

Date Collected: 09/16/13 14:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471A		20	139797	09/18/13 12:18	JRK	TAL BUF
Total/NA	Prep	3050B			139642	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139953	09/18/13 23:39	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-30-(0-0.25)

Lab Sample ID: 480-45969-19

Date Collected: 09/16/13 14:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 14:35	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/18/13 23:47	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-31-(0-0.25)

Lab Sample ID: 480-45969-20

Date Collected: 09/16/13 10:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 14:36	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/18/13 23:54	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-32-(0-0.25)

Lab Sample ID: 480-45969-21

Date Collected: 09/16/13 14:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 14:38	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/18/13 23:56	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-33-(0-0.25)

Lab Sample ID: 480-45969-22

Date Collected: 09/16/13 15:20

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139957	09/19/13 09:47	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	139971	09/19/13 15:20	CDC	TAL BUF
Total/NA	Prep	5035			139702	09/18/13 08:33	CMD	TAL BUF
Total/NA	Analysis	MAVPH		1	140221	09/21/13 12:07	LMW	TAL BUF
Total/NA	Analysis	MA VPH		1	140681	09/23/13 14:26	GSR	TAL BUF
Total/NA	Prep	3546			139607	09/18/13 05:21	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			139639	09/18/13 08:08	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	139854	09/19/13 07:59	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	140245	09/20/13 10:00	DGB	TAL BUF
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		20	139797	09/18/13 12:34	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/18/13 23:59	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-34-(0-0.25)

Lab Sample ID: 480-45969-23

Date Collected: 09/16/13 15:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139957	09/19/13 09:47	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	139971	09/19/13 15:46	CDC	TAL BUF
Total/NA	Prep	5035			139702	09/18/13 08:33	CMD	TAL BUF
Total/NA	Analysis	MAVPH		5	139888	09/19/13 14:22	CMD	TAL BUF
Total/NA	Analysis	MA VPH		5	140681	09/23/13 14:26	GSR	TAL BUF
Total/NA	Fraction	MA EPH Frac			139639	09/18/13 08:08	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	139854	09/19/13 08:29	DGB	TAL BUF
Total/NA	Prep	3546			139607	09/18/13 05:21	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	140245	09/20/13 10:00	DGB	TAL BUF
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		20	139797	09/18/13 12:36	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:01	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-35-(0-0.25)

Lab Sample ID: 480-45969-24

Date Collected: 09/16/13 15:50

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139791	09/18/13 14:57	NQN	TAL BUF
Total/NA	Analysis	8260C		1	140106	09/20/13 02:59	LCH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-35-(0-0.25)

Lab Sample ID: 480-45969-24

Date Collected: 09/16/13 15:50

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139702	09/18/13 08:33	CMD	TAL BUF
Total/NA	Analysis	MAVPH		1	140221	09/21/13 12:46	LMW	TAL BUF
Total/NA	Analysis	MA VPH		1	140681	09/23/13 14:26	GSR	TAL BUF
Total/NA	Prep	3546			139607	09/18/13 05:21	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			139639	09/18/13 08:08	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	139854	09/19/13 08:58	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	140245	09/20/13 10:00	DGB	TAL BUF
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 14:40	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:04	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-36-(0-0.25)

Lab Sample ID: 480-45969-25

Date Collected: 09/16/13 15:05

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		20	139797	09/18/13 12:40	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:06	LMH	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		5	140202	09/19/13 15:19	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-38-(0-0.25)

Lab Sample ID: 480-45969-26

Date Collected: 09/16/13 09:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 98.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 14:46	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:08	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-39-(0-0.25)

Lab Sample ID: 480-45969-27

Date Collected: 09/16/13 08:15

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 14:47	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:10	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-40-(0-0.25)

Lab Sample ID: 480-45969-28

Date Collected: 09/16/13 08:35

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139957	09/19/13 09:47	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	139971	09/19/13 16:11	CDC	TAL BUF
Total/NA	Prep	5035			139702	09/18/13 09:34	CMD	TAL BUF
Total/NA	Analysis	MAVPH		1	140221	09/21/13 13:24	LMW	TAL BUF
Total/NA	Analysis	MA VPH		1	140681	09/23/13 14:26	GSR	TAL BUF
Total/NA	Prep	3546			139607	09/18/13 05:21	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			139639	09/18/13 08:08	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	139854	09/19/13 09:28	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	140245	09/20/13 10:00	DGB	TAL BUF
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		5	139797	09/18/13 15:17	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:12	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-41-(0-0.25)

Lab Sample ID: 480-45969-29

Date Collected: 09/16/13 09:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		20	139797	09/18/13 12:48	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:15	LMH	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		2	140202	09/19/13 15:21	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-43-(0-0.25)

Lab Sample ID: 480-45969-30

Date Collected: 09/16/13 09:45

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 98.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		20	139797	09/18/13 12:50	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:22	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-44-(0-0.25)

Lab Sample ID: 480-45969-31

Date Collected: 09/16/13 15:25

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 99.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			139957	09/19/13 09:47	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	139971	09/19/13 16:36	CDC	TAL BUF
Total/NA	Prep	5035			139702	09/18/13 09:34	CMD	TAL BUF
Total/NA	Analysis	MAVPH		5	139888	09/19/13 15:29	CMD	TAL BUF
Total/NA	Analysis	MA VPH		5	140681	09/23/13 14:26	GSR	TAL BUF
Total/NA	Prep	3546			139607	09/18/13 05:21	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			139639	09/18/13 08:08	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	139854	09/19/13 09:57	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	140245	09/20/13 10:00	DGB	TAL BUF
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		20	139797	09/18/13 12:51	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:24	LMH	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		5	140202	09/19/13 15:24	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-45-(0-0.25)

Lab Sample ID: 480-45969-32

Date Collected: 09/16/13 09:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		20	139797	09/18/13 12:57	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:27	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Client Sample ID: WCSS-46-(0-0.25)

Lab Sample ID: 480-45969-33

Date Collected: 09/16/13 09:10

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 99.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		20	139797	09/18/13 12:58	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:29	LMH	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		2	140202	09/19/13 15:26	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-47-(0-0.25)

Lab Sample ID: 480-45969-34

Date Collected: 09/16/13 07:55

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 99.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 14:51	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:31	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: WCSS-48-(0-0.25)

Lab Sample ID: 480-45969-35

Date Collected: 09/16/13 07:30

Matrix: Solid

Date Received: 09/18/13 01:30

Percent Solids: 97.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			139621	09/18/13 08:00	JRK	TAL BUF
Total/NA	Analysis	7471A		1	139797	09/18/13 15:05	JRK	TAL BUF
Total/NA	Prep	3050B			139644	09/18/13 10:50	NMD2	TAL BUF
Total/NA	Analysis	6010		1	139946	09/19/13 00:42	LMH	TAL BUF
Total/NA	Analysis	Moisture		1	139842	09/18/13 21:57	GTG	TAL BUF

Client Sample ID: TB-09162013

Lab Sample ID: 480-45969-38

Date Collected: 09/16/13 12:00

Matrix: Water

Date Received: 09/18/13 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	139838	09/19/13 02:13	LCH	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TestAmerica Buffalo

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	11-06-13
California	NELAP	9	1169CA	10-30-13
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	10-01-13
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13
Wisconsin	State Program	5	998310390	08-31-14

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
MA VPH	Massachusetts - Volatile Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
MAVPH	Massachusetts - Volatile Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
MA-EPH	Massachusetts - Extractable Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7471A	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-45969-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-45969-1	WCSS-11-(0-0.25)	Solid	09/16/13 12:00	09/18/13 01:30
480-45969-2	WCSS-13-(0-0.25)	Solid	09/16/13 11:45	09/18/13 01:30
480-45969-3	WCSS-14-(0-0.25)	Solid	09/16/13 11:50	09/18/13 01:30
480-45969-4	WCSS-15-(0-0.25)	Solid	09/16/13 11:35	09/18/13 01:30
480-45969-5	WCSS-16-(0-0.25)	Solid	09/16/13 11:05	09/18/13 01:30
480-45969-6	WCSS-18-(0-0.25)	Solid	09/16/13 11:00	09/18/13 01:30
480-45969-7	WCSS-17-(0-0.25)	Solid	09/16/13 12:25	09/18/13 01:30
480-45969-8	WCSS-19-(0-0.25)	Solid	09/16/13 12:35	09/18/13 01:30
480-45969-9	WCSS-20-(0-0.25)	Solid	09/16/13 12:45	09/18/13 01:30
480-45969-10	WCSS-21-(0-0.25)	Solid	09/16/13 11:30	09/18/13 01:30
480-45969-11	WCSS-22-(0-0.25)	Solid	09/16/13 10:45	09/18/13 01:30
480-45969-12	WCSS-23-(0-0.25)	Solid	09/16/13 13:10	09/18/13 01:30
480-45969-13	WCSS-25-(0-0.25)	Solid	09/16/13 13:35	09/18/13 01:30
480-45969-14	WCSS-24-(0-0.25)	Solid	09/16/13 12:55	09/18/13 01:30
480-45969-15	WCSS-26-(0-0.25)	Solid	09/16/13 14:55	09/18/13 01:30
480-45969-16	WCSS-27-(0-0.25)	Solid	09/16/13 14:15	09/18/13 01:30
480-45969-17	WCSS-28-(0-0.25)	Solid	09/16/13 13:30	09/18/13 01:30
480-45969-18	WCSS-29-(0-0.25)	Solid	09/16/13 14:15	09/18/13 01:30
480-45969-19	WCSS-30-(0-0.25)	Solid	09/16/13 14:30	09/18/13 01:30
480-45969-20	WCSS-31-(0-0.25)	Solid	09/16/13 10:35	09/18/13 01:30
480-45969-21	WCSS-32-(0-0.25)	Solid	09/16/13 14:45	09/18/13 01:30
480-45969-22	WCSS-33-(0-0.25)	Solid	09/16/13 15:20	09/18/13 01:30
480-45969-23	WCSS-34-(0-0.25)	Solid	09/16/13 15:45	09/18/13 01:30
480-45969-24	WCSS-35-(0-0.25)	Solid	09/16/13 15:50	09/18/13 01:30
480-45969-25	WCSS-36-(0-0.25)	Solid	09/16/13 15:05	09/18/13 01:30
480-45969-26	WCSS-38-(0-0.25)	Solid	09/16/13 09:35	09/18/13 01:30
480-45969-27	WCSS-39-(0-0.25)	Solid	09/16/13 08:15	09/18/13 01:30
480-45969-28	WCSS-40-(0-0.25)	Solid	09/16/13 08:35	09/18/13 01:30
480-45969-29	WCSS-41-(0-0.25)	Solid	09/16/13 09:55	09/18/13 01:30
480-45969-30	WCSS-43-(0-0.25)	Solid	09/16/13 09:45	09/18/13 01:30
480-45969-31	WCSS-44-(0-0.25)	Solid	09/16/13 15:25	09/18/13 01:30
480-45969-32	WCSS-45-(0-0.25)	Solid	09/16/13 09:30	09/18/13 01:30
480-45969-33	WCSS-46-(0-0.25)	Solid	09/16/13 09:10	09/18/13 01:30
480-45969-34	WCSS-47-(0-0.25)	Solid	09/16/13 07:55	09/18/13 01:30
480-45969-35	WCSS-48-(0-0.25)	Solid	09/16/13 07:30	09/18/13 01:30
480-45969-38	TB-09162013	Water	09/16/13 12:00	09/18/13 01:30

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAir
THE LEADER IN EN



480-45969 Chain of Custody

TAL-4124 (1007)

Client Woodward & Curran			Project Manager Andrea Hevey			Date 9/16/13			Chain of Custody Number 238333		
Address 95 Cedar St, Ste 100			Telephone Number (Area Code)/Fax Number 401-273-1007			Lab Number			Page 1 of 5		
City Providence	State RI	Zip Code 02903	Site Contact Andrea Hevey		Lab Contact Becky Mason		Analysis (Attach list if more space is needed)			Special Instructions/ Conditions of Receipt	
Project Name and Location (State) Quincy - Intervale, Quincy, MA			Carrier/Waybill Number								
Contract/Purchase Order/Quote No.											

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix					Containers & Preservatives												
			Air	Aqueous	Sed	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	MEOH	PCBs (8-82, Soxhlet)	MCP 14 Metals	VCL (8-60)	VPH (MADER)	EPH (MADER)	TCLP Metals	
WCSS-11-(0.25-0.75)	9/16/13					X	X							X	X				X	PS
WCSS-13-(0.25-0.75)						X	X							X	X			X		PS
WCSS-11-(0-0.25)	9/16/13	1200				X	X							X	X					
WCSS-11-(0.75-1.0)						X	X							X	X			X		PS
WCSS-13-(0-0.25)		1145				X	X							X	X					
WCSS-13-(0.75-1.0)						X	X							X	X			X		PS
WCSS-14-(0-0.25)		1150				X	X								X					
WCSS-15-(0-0.25)		1135				X	X								X					
WCSS-16-(0-0.25)		1105				X	X								X					
WCSS-18-(0-0.25)		1100				X	X							X	X					
WCSS-17-(0-0.25)		1225				X	X							X	X	X	X	X		
WCSS-19-(0-0.25)		1235				X	X							X	X					

Possible Hazard Identification			Sample Disposal			(A fee may be assessed if samples are retained longer than 1 month)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months	
Turn Around Time Required			QC Requirements (Specify)					
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input checked="" type="checkbox"/> Other 5 days	CAM methods required, report to MCP S-1 standards		
1. Relinquished By E. V. Rider			Date 9/16/13 Time 10:00			1. Received By [Signature] Date 9/17/13 Time 10:30		
2. Relinquished By M. C. TAL			Date 9/17/13 Time 16:00			2. Received By [Signature] Date 9.18.13 Time 0150		
3. Relinquished By			Date			3. Received By		
Comments								

3.7, 3.1, 3.6 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client <u>Woodward & Curran</u>			Project Manager <u>Andrea Hevey</u>			Date <u>9/16/13</u>		Chain of Custody Number <u>238314</u>		
Address <u>95 Cedar St, Ste 100</u>			Telephone Number (Area Code)/Fax Number <u>401-273-1007, ahevey@woodwardcurran.com</u>			Lab Number		Page <u>2</u> of <u>5</u>		
City <u>Providence</u>	State <u>RI</u>	Zip Code	Site Contact <u>Andrea Hevey</u>	Lab Contact <u>Becky Mason</u>	Analysis (Attach list if more space is needed)					
Project Name and Location (State) <u>Quincy-Intervale, Quincy, MA</u>			Carrier/Waybill Number			Special Instructions/ Conditions of Receipt				
Contract/Purchase Order/Quote No.										

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives										Comments or Remarks											
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	MEOH	PCBs (80)	MCP 14	VOCs (1)						VPH (1)	EPH (1)	TCLP (1)				
WCSS-20-(0-0.25)	9/16/13	1245				X	X							X	X												*Fractions only for	
WCSS-21-(0-0.25)		1130				X	X							X	X	X	X	X									*TCLP analysis in	
WCSS-22-(0-0.25)		1045				X	X							X	X												Decided pending a	
WCSS-23-(0-0.25)		1310				X	X							X	X	X	X	X									results. Contact H	
WCSS-25-(0-0.25)		1335				X	X							X	X	X	X	X									With preliminary m	
WCSS-23-(0.25-0.75)							X	X							X	X			X									data for TCLP a
WCSS-23-(0.75-1.0)							X	X							X	X			X									determination i
WCSS-24-(0-0.25)			1255				X	X							X	X												TCLP analyses
WCSS-24-(0.25-0.75)							X	X							X	X			X									
WCSS-24-(0.75-1.0)							X	X							X	X			X									
WCSS-26-(0-0.25)	✓	1445				X	X							X	X	X	X	X	X									
WCSS-27-(0-0.25)		1415				X	X							X	X	X	X	X	X									

Possible Hazard Identification				Sample Disposal				(A fee may be assessed if samples are retained longer than 1 month)			
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months				

Turn Around Time Required				QC Requirements (Specify)			
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input checked="" type="checkbox"/> Other <u>5 day</u>	CAU methods required, report to MCP S-1 standards GISKey & excel file with PDF report	

1. Relinquished By <u>Brent V. (signature)</u>	Date <u>9/17/13</u>	Time <u>1020</u>	1. Received By <u>M.S. (signature)</u>	Date <u>9/17/13</u>	Time <u>10:00</u>
2. Relinquished By <u>M.C. (signature)</u>	Date <u>9/17/13</u>	Time <u>1600</u>	2. Received By <u>(signature)</u>	Date <u>9-18-13</u>	Time <u>0130</u>
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

3.7, 3.1, 3.6 #1

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client <u>Woodward & Curran</u>			Project Manager <u>Andrica Heury</u>			Date <u>9/16/13</u>		Chain of Custody Number <u>238235</u>	
Address <u>95 Cedar St. Ste 100</u>			Telephone Number (Area Code)/Fax Number <u>401-273-1007, aheury@woodwardcurran.com</u>			Lab Number		Page <u>3</u> of <u>5</u>	
City <u>Providence</u>	State <u>RI</u>	Zip Code <u>02903</u>	Site Contact <u>Andrica Heury</u>		Lab Contact <u>Becky Mason</u>		Analysis (Attach list if more space is needed)		
Project Name and Location (State) <u>Quincy-Intervale, Quincy, MA</u>			Carrier/Waybill Number			Special Instructions/ Conditions of Receipt			
Contract/Purchase Order/Quote No.									

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives										Conditions of Receipt																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Rec'd	PCB (80)	MCP 14	IDL (8260)	VPH (Hach)	EPH (Hach)	TCLP Metals	PCB (80)	MCP 14	IDL (8260)	VPH (Hach)	EPH (Hach)	TCLP Metals																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
WCSS-28-(0-0.25)	9/16/13	1330				X	X								X	X	X	X	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						</

* Fractions only for VPH
* TCLP analysis may be needed pending analytical results. Contact the PM with preliminary metals data for TCLP analysis determination. HOLD TCLP analyses

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 5 days

1. Relinquished By <u>Barry V. Diogen</u>	Date <u>9/17/13</u>	Time <u>1020</u>
2. Relinquished By <u>M C TAL</u>	Date <u>9/17/13</u>	Time <u>1600</u>
3. Relinquished By	Date	Time

QC Requirements (Specify) CAM methods required, report to MEP S-1 Standards
GIS key & excel file with PDF report

1. Received By <u>TAL</u>	Date <u>9/17/13</u>	Time <u>1020</u>
2. Received By <u>TAL</u>	Date <u>9/17/13</u>	Time <u>1630</u>
3. Received By	Date	Time

Comments

3.7, 3.1, 3.6 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy



Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client <u>Woodward & Curran</u>			Project Manager <u>Andrea Hevey</u>			Date <u>9/16/13</u>			Chain of Custody Number <u>238336</u>		
Address <u>95 Cedar St, Ste 100</u>			Telephone Number (Area Code)/Fax Number <u>401-273-1007, ahevey@woodwardcurran.com</u>			Lab Number			Page <u>4</u> of <u>5</u>		
City <u>Providence</u>	State <u>RI</u>	Zip Code	Site Contact <u>Andrea Hevey</u>			Lab Contact <u>Becky Mason</u>			Analysis (Attach list if more space is needed)		
Project Name and Location (State) <u>Guincy-Intervale, Guincy, MA</u>			Carrier/Waybill Number						Special Instructions/ Conditions of Receipt		
Contract/Purchase Order/Quote No.											

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives										Analysis (Attach list if more space is needed)									
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	MeOH	PCB (S&S)	MCPH Metals	VOC (S&S)	VOC (M&P)	EDL (M&P)	TCLP Metals							
WCSS-36-(0-0.25)	9/16/13	1505				X	X							X	X											* Fractions only for
WCSS-38-(0-0.25)		935				X	X								X											* TCLP analysis may be
WCSS-39-(0-0.25)		815				X	X								X											needed pending a
WCSS-40-(0-0.25)		835				X	X								X	X	X	X	X							results. Contact
WCSS-40-(0.25-0.75)						X	X								X	X				X						(S) with preliminary
WCSS-40-(0.75-1.0)						X	X								X	X				X						(S) data for TCLP
WCSS-41-(0-0.25)		955				X	X								X	X										determination. H
WCSS-43-(0-0.25)		945				X	X								X	X										TCLP analyses
WCSS-44-(0-0.25)		1525				X	X								X	X	X	X	X							
WCSS-44-(0.25-0.75)						X	X								X	X				X						(S)
WCSS-44-(0.75-1.0)						X	X								X	X				X						(S)
WCSS-45-(0-0.25)		930				X	X								X	X										

Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown			Sample Disposal <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			(A fee may be assessed if samples are retained longer than 1 month)		
Turn Around Time Required <input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input checked="" type="checkbox"/> Other <u>5 days</u>			QC Requirements (Specify) <u>CAM methods required, report to MCP S-1 Standards</u> <u>GISKey & Excel file with PDF report</u>					
1. Relinquished By <u>Brian V. (Signature)</u>			Date <u>9/17/13</u>			Time <u>10:00</u>		
2. Relinquished By <u>TAL</u>			Date <u>9/17/13</u>			Time <u>16:00</u>		
3. Relinquished By			Date			Time		
1. Received By <u>TAL</u>			Date <u>9/17/13</u>			Time <u>16:00</u>		
2. Received By <u>TAL</u>			Date <u>9/17/13</u>			Time <u>01:30</u>		
3. Received By			Date			Time		

Comments _____

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

3, 7, 3, 1, 3 6 #1

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client Woodland & Curran			Project Manager Andrea Hevey			Date 9/16/13		Chain of Custody Number 238337	
Address 95 Cedar St, Ste 100			Telephone Number (Area Code)/Fax Number 401-273-1007, ahevey@woodlandcurran.com			Lab Number		Page 5 of 5	
City Providence		State RI	Zip Code 02903		Site Contact Andrea Hevey		Lab Contact Becky Mason		Analysis (Attach list if more space is needed)
Project Name and Location (State) Quincy-Intervale, Quincy, MA					Carrier/Waybill Number				
Contract/Purchase Order/Quote No.									

Contract/Purchase Order/Quote No.			Matrix				Containers & Preservatives							Conditions of Receipt														
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	PCBs (80)	MCP (41)	VOC (82)	UPH (14)	EPH (14)											
WCSS-46-(0-0.25)	9/16/13	910				X	X							X														
WCSS-47-(0-0.25)	↓	755				X	X							X														
WCSS-48-(0-0.25)		730				X	X							X														
WCSS-47-(0-0.25) MS		755				X	X							X					MS: Matrix Spike									
WCSS-47-(0-0.25) MSD		755				X	X							X					MSD: Matrix Spike Dep									
WCSS-918-(0-0.25)		1100					X	X						X														
WCSS-16-(0-0.25) MS	↓	1105				X	X							X														
WCSS-16-(0-0.25) MSD		1105				X	X							X														
WCEB-27-(0-0.25)		1425	X				X							X														
TB-C9162013	✓	1200	X							X					X													
WCSS-935-(0-0.25)	9/16/13	1550				X	X							X														

Possible Hazard Identification			Sample Disposal			(A fee may be assessed if samples are retained longer than 1 month)		
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For _____ Months	
Turn Around Time Required			QC Requirements (Specify)					
<input type="checkbox"/> 24 Hours	<input type="checkbox"/> 48 Hours	<input type="checkbox"/> 7 Days	<input type="checkbox"/> 14 Days	<input type="checkbox"/> 21 Days	<input checked="" type="checkbox"/> Other 5 day	CAM methods required, report to MCP S-1 Standards GIS key & excel file with PDF report		
1. Relinquished By Brent V. Coughlin			Date 9/17/13 Time 1020			1. Received By TAL Date 9/17/13 Time 1020		
2. Relinquished By M.C. TAL			Date 9/17/13 Time 1600			2. Received By TAL Date 9-18-13 Time 0130		
3. Relinquished By			Date			3. Received By		

Comments

3.7, 3.1, 3.6 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-45969-1

Login Number: 45969

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-47378-1

Client Project/Site: Quincy Inervale

For:

Woodard & Curran Inc

95 Cedar St

Suite 100

Providence, Rhode Island 02903

Attn: Ms. Andrea Hevey



Authorized for release by:

10/16/2013 10:59:23 AM

Becky Mason, Project Manager II

(413)572-4000

becky.mason@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Job ID: 480-47378-1

Laboratory: TestAmerica Buffalo

Narrative

Receipt

The samples were received on 10/8/2013 1:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.8° C, 3.0° C and 4.2° C.

GC/MS VOA

Method 8260C: The laboratory control sample (LCS) and / or the laboratory control sample duplicate (LCSD) for batch 144314 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample.

Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-1R (480-47378-13), MW-2R (480-47378-8), MW-3R (480-47378-15), MW-4R (480-47378-17), WCMW-1 (480-47378-12), WCMW-10 (480-47378-2), WCMW-11 (480-47378-10), WCMW-2 (480-47378-5), WCMW-3 (480-47378-16), WCMW-4 (480-47378-11), WCMW-5 (480-47378-3), WCMW-6 (480-47378-1), WCMW-7 (480-47378-6), WCMW-8 (480-47378-9), WCMW-9 (480-47378-4). Elevated reporting limits (RLs) are provided.

With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Butyl Ethyl Ether, tert-Amyl Methyl Ether, & Tetrahydrofuran.

No other analytical or quality issues were noted.

GC VOA

Method MAVPH: The following samples were diluted due to the foaming nature of the sample matrix: MW-1R (480-47378-13), MW-2R (480-47378-8), MW-3R (480-47378-15), WCMW-1 (480-47378-12), WCMW-10 (480-47378-2), WCMW-11 (480-47378-10), WCMW-2 (480-47378-5), WCMW-3 (480-47378-16), WCMW-4 (480-47378-11), WCMW-5 (480-47378-3), WCMW-6 (480-47378-1), WCMW-7 (480-47378-6), WCMW-8 (480-47378-9), WCMW-9 (480-47378-4). Elevated reporting limits (RLs) are provided.

Method MAVPH: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-4R (480-47378-17). Elevated reporting limits (RLs) are provided.

At the request of the client, an abbreviated/modified MCP compound list was reported for this job.

No other analytical or quality issues were noted.

GC Semi VOA

Method MA-EPH: Surrogate recovery 1-Chlorooctadecane for the following samples is outside control limits due to matrix: MW-1R (480-47378-13), MW-3R (480-47378-15), WCMW-1 (480-47378-12), WCMW-3 (480-47378-16), WCMW-4 (480-47378-11).

Method MA-EPH: The continuing calibration verification (CCV) associated with batch 144342 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method MA-EPH: Surrogate recovery 1-Chlorooctadecane for the following sample is outside control limits due to matrix: MW-4R (480-47378-17).

Method MA-EPH: The method blank (MB 480-144324/1-B) contains the small hots in the C ranges above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. Any associated sample positives for these ranges will be flagged with a "B" to indicate such.

Per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol; however they do achieve method 1 GW2/GW3 standards.

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Job ID: 480-47378-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

No other analytical or quality issues were noted.

Metals

No analytical or quality issues were noted.

Organic Prep

Method 3510C: After hexane exchanging the following samples formed precipitates along the walls of the turbos: MW-3R (480-47378-15), WCMW-11 (480-47378-10), WCMW-2 (480-47378-5), WCMW-5 (480-47378-3), WCMW-8 (480-47378-9), WCMW-9 (480-47378-4).

No other analytical or quality issues were noted.

MassDEP Analytical Protocol Certification Form					
Laboratory Name: TestAmerica Buffalo		Project #: 480-47378-1			
Project Location: Quincy		RTN:			
This form provides certifications for the following data set: list Laboratory Sample ID Number(s): 480-47378-1[1-15]					
Matrices: <input checked="" type="checkbox"/> Groundwater/Surface Water <input type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
CAM Protocols (check all that apply below):					
8260 VOC CAM II A <input checked="" type="checkbox"/>	7470/7471 Hg CAM III B <input checked="" type="checkbox"/>	Mass DEP VPH CAM IV A <input checked="" type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	6010 Metals CAM III C <input checked="" type="checkbox"/>	Mass DEP EPH CAM IV B <input checked="" type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input type="checkbox"/>	9014 Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Responses to Questions G, H and I below are required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
¹ All negative responses must be addressed in an attached laboratory narrative.					
I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.					
Signature:		Position: Project Manager			
Printed Name: Becky Mason		Date: 10/15/13 16:00			
This form has been electronically signed and approved					

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-6

Lab Sample ID: 480-47378-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.14	J	10.0	1.60	ug/L	10		8260C	Total/NA
C5-C8 Aliphatics (adjusted)	27.5	J	50.0	15.0	ug/L	10		MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	27.5	J	50.0	15.0	ug/L	10		MAVPH	Total/NA
Phenanthrene	1.89	J	9.47	1.89	ug/L	1		MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	25.1	J B	47.4	9.47	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	13.9	J B	47.4	9.47	ug/L	1		MA-EPH	Total/NA
Barium	0.399		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.0296		0.0100	0.00126	mg/L	1		6010	Dissolved
Zinc	0.687		0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00161	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: WCMW-10

Lab Sample ID: 480-47378-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.90	J	10.0	1.60	ug/L	10		8260C	Total/NA
C11-C22 Aromatics (unadjusted)	19.9	J B	47.4	9.48	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	10.3	J B	47.4	9.48	ug/L	1		MA-EPH	Total/NA
Barium	0.351		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00257	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Zinc	0.00431	J	0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00187	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: WCMW-5

Lab Sample ID: 480-47378-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	82.4		10.0	7.50	ug/L	10		8260C	Total/NA
Methyl tert-butyl ether	7.93	J	10.0	1.60	ug/L	10		8260C	Total/NA
C9-C10 Aromatics	9.38	J	50.0	5.00	ug/L	10		MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	26.8	J	50.0	15.0	ug/L	10		MAVPH	Total/NA
Phenanthrene	2.52	J	9.57	1.91	ug/L	1		MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	22.8	J B	47.9	9.57	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	19.5	J B	47.9	9.57	ug/L	1		MA-EPH	Total/NA
Barium	0.396		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00251	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Zinc	0.0107	J	0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00160	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: WCMW-9

Lab Sample ID: 480-47378-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	3.60	J	10.0	1.60	ug/L	10		8260C	Total/NA
Trichloroethene	5.33	J	10.0	4.60	ug/L	10		8260C	Total/NA
Phenanthrene	1.93	J	9.47	1.89	ug/L	1		MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	15.9	J B	47.3	9.47	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	9.61	J	47.3	9.47	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	14.1	J B	47.3	9.47	ug/L	1		MA-EPH	Total/NA
Barium	0.337		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00862	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Arsenic	0.00641	J	0.0100	0.00555	mg/L	1		6010	Dissolved
Zinc	0.0638		0.0500	0.00150	mg/L	1		6010	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-9 (Continued)

Lab Sample ID: 480-47378-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.00160	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: WCMW-2

Lab Sample ID: 480-47378-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3-Dichlorobenzene	11.3		10.0	7.80	ug/L	10		8260C	Total/NA
Methyl tert-butyl ether	4.08	J	10.0	1.60	ug/L	10		8260C	Total/NA
C9-C10 Aromatics	10.0	J	50.0	5.00	ug/L	10		MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	11.9	J B	47.5	9.49	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	19.6	J	47.5	9.49	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	17.6	J B	47.5	9.49	ug/L	1		MA-EPH	Total/NA
Barium	0.152		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00358	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Arsenic	0.00774	J	0.0100	0.00555	mg/L	1		6010	Dissolved
Zinc	0.0226	J	0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00163	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: WCMW-7

Lab Sample ID: 480-47378-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	86.0		5.00	4.05	ug/L	5		8260C	Total/NA
Trichloroethene	23.9		5.00	2.30	ug/L	5		8260C	Total/NA
C11-C22 Aromatics (unadjusted)	16.7	J B	47.3	9.47	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	16.5	J	47.3	9.47	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	11.9	J B	47.3	9.47	ug/L	1		MA-EPH	Total/NA
Barium	0.420		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00376	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Zinc	0.0130	J	0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00176	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: WCMW-907

Lab Sample ID: 480-47378-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (unadjusted)	15.4	J B	47.3	9.45	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	12.9	J B	47.3	9.45	ug/L	1		MA-EPH	Total/NA
Barium	0.417		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00138	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Zinc	0.00736	J	0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00181	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: MW-2R

Lab Sample ID: 480-47378-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	8.64	J	9.52	1.90	ug/L	1		MA-EPH	Total/NA
Fluoranthene	2.34	J	9.52	1.90	ug/L	1		MA-EPH	Total/NA
Fluorene	6.92	J	9.52	1.90	ug/L	1		MA-EPH	Total/NA
Naphthalene	3.16	J	9.52	1.90	ug/L	1		MA-EPH	Total/NA
Phenanthrene	11.3		9.52	1.90	ug/L	1		MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	77.0	B	47.6	9.52	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	13.2	J B	47.6	9.52	ug/L	1		MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-2R (Continued)

Lab Sample ID: 480-47378-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.248		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00335	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Zinc	0.00270	J	0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00131	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: WCMW-8

Lab Sample ID: 480-47378-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (unadjusted)	19.3	J B	47.4	9.49	ug/L	1		MA-EPH	Total/NA
Barium	0.335		0.0100	0.000700	mg/L	1		6010	Dissolved
Zinc	0.00301	J	0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00133	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: WCMW-11

Lab Sample ID: 480-47378-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (unadjusted)	16.0	J B	55.2	11.0	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	15.8	J	55.2	11.0	ug/L	1		MA-EPH	Total/NA
Barium	0.160		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00389	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Arsenic	0.00563	J	0.0100	0.00555	mg/L	1		6010	Dissolved
Zinc	0.0132	J	0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00172	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: WCMW-4

Lab Sample ID: 480-47378-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (unadjusted)	12.1	J B	47.5	9.50	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	11.4	J	47.5	9.50	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	10.8	J B	47.5	9.50	ug/L	1		MA-EPH	Total/NA
Barium	0.0754		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00225	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Zinc	0.00350	J	0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00126	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: WCMW-1

Lab Sample ID: 480-47378-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C9-C10 Aromatics	24.7	J	50.0	5.00	ug/L	10		MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	18.4	J	50.0	15.0	ug/L	10		MAVPH	Total/NA
Acenaphthene	4.94	J	9.54	1.91	ug/L	1		MA-EPH	Total/NA
Fluorene	3.78	J	9.54	1.91	ug/L	1		MA-EPH	Total/NA
Naphthalene	3.30	J	9.54	1.91	ug/L	1		MA-EPH	Total/NA
Phenanthrene	5.83	J	9.54	1.91	ug/L	1		MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	42.8	J B	47.7	9.54	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	109	B	47.7	9.54	ug/L	1		MA-EPH	Total/NA
Barium	0.0789		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00652	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Zinc	0.00426	J	0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00117	J	0.00500	0.00100	mg/L	1		6010	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-1R

Lab Sample ID: 480-47378-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (unadjusted)	12.7	J B	48.0	9.59	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	24.3	J	48.0	9.59	ug/L	1		MA-EPH	Total/NA
Barium	0.157		0.0100	0.000700	mg/L	1		6010	Dissolved
Vanadium	0.00159	J	0.0100	0.00150	mg/L	1		6010	Dissolved
Zinc	0.00171	J	0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00146	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: TB-10032013

Lab Sample ID: 480-47378-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	10.5	J	50.0	3.00	ug/L	1		8260C	Total/NA
Tetrahydrofuran	8.26	J	10.0	1.25	ug/L	1		8260C	Total/NA

Client Sample ID: MW-3R

Lab Sample ID: 480-47378-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	11.7		10.0	8.10	ug/L	10		8260C	Total/NA
Tetrachloroethene	10.4		10.0	3.60	ug/L	10		8260C	Total/NA
Trichloroethene	9.70	J	10.0	4.60	ug/L	10		8260C	Total/NA
C11-C22 Aromatics (unadjusted)	16.2	J B	47.6	9.52	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	21.5	J B	47.6	9.52	ug/L	1		MA-EPH	Total/NA
Cadmium	0.000720	J	0.00100	0.000500	mg/L	1		6010	Dissolved
Barium	0.146		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00721	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Arsenic	0.00609	J	0.0100	0.00555	mg/L	1		6010	Dissolved
Zinc	0.112		0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00123	J	0.00500	0.00100	mg/L	1		6010	Dissolved

Client Sample ID: WCMW-3

Lab Sample ID: 480-47378-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	3.60	J	10.0	1.60	ug/L	10		8260C	Total/NA
Vinyl chloride	11.4		10.0	9.00	ug/L	10		8260C	Total/NA
Phenanthrene	2.94	J	9.75	1.95	ug/L	1		MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	20.4	J B	48.8	9.75	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	15.3	J	48.8	9.75	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	10.8	J B	48.8	9.75	ug/L	1		MA-EPH	Total/NA
Barium	0.0463		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00160	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Arsenic	0.00573	J	0.0100	0.00555	mg/L	1		6010	Dissolved
Zinc	0.00514	J	0.0500	0.00150	mg/L	1		6010	Dissolved

Client Sample ID: MW-4R

Lab Sample ID: 480-47378-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	35.7		10.0	1.60	ug/L	10		8260C	Total/NA
Naphthalene	56.0		50.0	4.30	ug/L	10		8260C	Total/NA
Tert-amyl methyl ether	7.92	J	50.0	2.70	ug/L	10		8260C	Total/NA
C9-C10 Aromatics	99.0		50.0	5.00	ug/L	10		MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	65.9		50.0	15.0	ug/L	10		MAVPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-4R (Continued)

Lab Sample ID: 480-47378-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	27.1		9.55	1.91	ug/L	1		MA-EPH	Total/NA
Acenaphthene	98.3		9.55	1.91	ug/L	1		MA-EPH	Total/NA
Fluoranthene	3.88	J	9.55	1.91	ug/L	1		MA-EPH	Total/NA
Fluorene	43.4		9.55	1.91	ug/L	1		MA-EPH	Total/NA
Naphthalene	26.4		9.55	1.91	ug/L	1		MA-EPH	Total/NA
Phenanthrene	47.1		9.55	1.91	ug/L	1		MA-EPH	Total/NA
Pyrene	2.05	J	9.55	1.91	ug/L	1		MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	561	B	47.7	9.55	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	84.5	B	47.7	9.55	ug/L	1		MA-EPH	Total/NA
Barium	0.396		0.0100	0.000700	mg/L	1		6010	Dissolved
Nickel	0.00230	J	0.0100	0.00126	mg/L	1		6010	Dissolved
Zinc	0.00256	J	0.0500	0.00150	mg/L	1		6010	Dissolved
Chromium	0.00130	J	0.00500	0.00100	mg/L	1		6010	Dissolved
Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	313		50.0	50.0	ug/L	1		MA-EPH	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-6

Lab Sample ID: 480-47378-1

Date Collected: 10/03/13 08:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 17:37	10
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 17:37	10
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 17:37	10
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 17:37	10
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 17:37	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 17:37	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 17:37	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 17:37	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 17:37	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 17:37	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 17:37	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 17:37	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 17:37	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 17:37	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 17:37	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 17:37	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 17:37	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 17:37	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 17:37	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 17:37	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 17:37	10
2-Butanone (MEK)	<100	*	100	13.2	ug/L			10/11/13 17:37	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 17:37	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 17:37	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 17:37	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 17:37	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 17:37	10
Acetone	<500		500	30.0	ug/L			10/11/13 17:37	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 17:37	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 17:37	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 17:37	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 17:37	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 17:37	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 17:37	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 17:37	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 17:37	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 17:37	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 17:37	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 17:37	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 17:37	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 17:37	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 17:37	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 17:37	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 17:37	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 17:37	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 17:37	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 17:37	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 17:37	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 17:37	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-6

Lab Sample ID: 480-47378-1

Date Collected: 10/03/13 08:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 17:37	10
Methyl tert-butyl ether	2.14	J	10.0	1.60	ug/L			10/11/13 17:37	10
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 17:37	10
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 17:37	10
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 17:37	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 17:37	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 17:37	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 17:37	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 17:37	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 17:37	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 17:37	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 17:37	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 17:37	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 17:37	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 17:37	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 17:37	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 17:37	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 17:37	10
Trichloroethene	<10.0		10.0	4.60	ug/L			10/11/13 17:37	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 17:37	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 17:37	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 17:37	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	95		70 - 130		10/11/13 17:37	10
1,2-Dichloroethane-d4 (Surr)	94		70 - 130		10/11/13 17:37	10
4-Bromofluorobenzene (Surr)	105		70 - 130		10/11/13 17:37	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	27.5	J	50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	27.5	J	50.0	15.0	ug/L			10/08/13 11:15	10
C9-C10 Aromatics	<50.0		50.0	5.00	ug/L			10/08/13 11:15	10
C9-C12 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 11:15	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	95		70 - 130		10/08/13 11:15	10
2,5-Dibromotoluene (pid)	98		70 - 130		10/08/13 11:15	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Acenaphthene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Acenaphthylene (TSP)	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Anthracene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Benzo[a]anthracene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Benzo[a]pyrene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-6

Lab Sample ID: 480-47378-1

Date Collected: 10/03/13 08:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Benzo[g,h,i]perylene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Benzo[k]fluoranthene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Chrysene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Dibenz(a,h)anthracene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Fluoranthene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Fluorene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Indeno[1,2,3-cd]pyrene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Naphthalene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Phenanthrene	1.89	J	9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
Pyrene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 16:29	1
C11-C22 Aromatics (unadjusted)	25.1	J B	47.4	9.47	ug/L		10/11/13 11:32	10/12/13 16:29	1
C19-C36 Aliphatics	<47.4		47.4	9.47	ug/L		10/11/13 11:32	10/12/13 16:29	1
C9-C18 Aliphatics	13.9	J B	47.4	9.47	ug/L		10/11/13 11:32	10/12/13 16:29	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	45		40 - 140				10/11/13 11:32	10/12/13 16:29	1
2-Bromonaphthalene	84		40 - 140				10/11/13 11:32	10/12/13 16:29	1
2-Fluorobiphenyl	98		40 - 140				10/11/13 11:32	10/12/13 16:29	1
o-Terphenyl	71		40 - 140				10/11/13 11:32	10/12/13 16:29	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/10/13 20:20	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/10/13 20:20	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/10/13 20:20	1
Barium	0.399		0.0100	0.000700	mg/L		10/08/13 08:10	10/10/13 20:20	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/10/13 20:20	1
Nickel	0.0296		0.0100	0.00126	mg/L		10/08/13 08:10	10/10/13 20:20	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/10/13 20:20	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/10/13 20:20	1
Arsenic	<0.0100		0.0100	0.00555	mg/L		10/08/13 08:10	10/10/13 20:20	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/10/13 20:20	1
Zinc	0.687		0.0500	0.00150	mg/L		10/08/13 08:10	10/10/13 20:20	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/10/13 20:20	1
Chromium	0.00161	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/10/13 20:20	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:16	1

Client Sample ID: WCMW-10

Lab Sample ID: 480-47378-2

Date Collected: 10/03/13 09:45

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 18:02	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-10

Lab Sample ID: 480-47378-2

Date Collected: 10/03/13 09:45

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 18:02	10
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 18:02	10
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 18:02	10
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 18:02	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 18:02	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 18:02	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 18:02	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 18:02	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 18:02	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 18:02	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 18:02	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 18:02	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 18:02	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 18:02	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 18:02	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 18:02	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 18:02	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 18:02	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 18:02	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 18:02	10
2-Butanone (MEK)	<100 *		100	13.2	ug/L			10/11/13 18:02	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 18:02	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 18:02	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 18:02	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 18:02	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 18:02	10
Acetone	<500		500	30.0	ug/L			10/11/13 18:02	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 18:02	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 18:02	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 18:02	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 18:02	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 18:02	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 18:02	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 18:02	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 18:02	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 18:02	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 18:02	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 18:02	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 18:02	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 18:02	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 18:02	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 18:02	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 18:02	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 18:02	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 18:02	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 18:02	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 18:02	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 18:02	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 18:02	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-10

Lab Sample ID: 480-47378-2

Date Collected: 10/03/13 09:45

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	2.90	J	10.0	1.60	ug/L			10/11/13 18:02	10
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 18:02	10
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 18:02	10
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 18:02	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 18:02	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 18:02	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 18:02	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 18:02	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 18:02	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 18:02	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 18:02	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 18:02	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 18:02	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 18:02	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 18:02	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 18:02	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 18:02	10
Trichloroethene	<10.0		10.0	4.60	ug/L			10/11/13 18:02	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 18:02	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 18:02	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 18:02	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	92		70 - 130		10/11/13 18:02	10
1,2-Dichloroethane-d4 (Surr)	94		70 - 130		10/11/13 18:02	10
4-Bromofluorobenzene (Surr)	104		70 - 130		10/11/13 18:02	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 17:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 17:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 11:53	10
C9-C10 Aromatics	<50.0		50.0	5.00	ug/L			10/08/13 11:53	10
C9-C12 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 11:53	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	96		70 - 130		10/08/13 11:53	10
2,5-Dibromotoluene (pid)	97		70 - 130		10/08/13 11:53	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Acenaphthene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Acenaphthylene (TSP)	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Anthracene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Benzo[a]anthracene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Benzo[a]pyrene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Benzo[b]fluoranthene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-10

Lab Sample ID: 480-47378-2

Date Collected: 10/03/13 09:45

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Benzo[k]fluoranthene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Chrysene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Dibenz[a,h]anthracene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Fluoranthene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Fluorene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Indeno[1,2,3-cd]pyrene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Naphthalene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Phenanthrene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
Pyrene	<9.48		9.48	1.90	ug/L		10/11/13 11:32	10/12/13 16:59	1
C11-C22 Aromatics (unadjusted)	19.9	J B	47.4	9.48	ug/L		10/11/13 11:32	10/12/13 16:59	1
C19-C36 Aliphatics	<47.4		47.4	9.48	ug/L		10/11/13 11:32	10/12/13 16:59	1
C9-C18 Aliphatics	10.3	J B	47.4	9.48	ug/L		10/11/13 11:32	10/12/13 16:59	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	41		40 - 140	10/11/13 11:32	10/12/13 16:59	1
2-Bromonaphthalene	89		40 - 140	10/11/13 11:32	10/12/13 16:59	1
2-Fluorobiphenyl	101		40 - 140	10/11/13 11:32	10/12/13 16:59	1
o-Terphenyl	66		40 - 140	10/11/13 11:32	10/12/13 16:59	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 19:52	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 19:52	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 19:52	1
Barium	0.351		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 19:52	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 19:52	1
Nickel	0.00257	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 19:52	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 19:52	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 19:52	1
Arsenic	<0.0100		0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 19:52	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 19:52	1
Zinc	0.00431	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 19:52	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 19:52	1
Chromium	0.00187	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 19:52	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:18	1

Client Sample ID: WCMW-5

Lab Sample ID: 480-47378-3

Date Collected: 10/03/13 10:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 18:27	10
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 18:27	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-5

Lab Sample ID: 480-47378-3

Date Collected: 10/03/13 10:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 18:27	10
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 18:27	10
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 18:27	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 18:27	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 18:27	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 18:27	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 18:27	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 18:27	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 18:27	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 18:27	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 18:27	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 18:27	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 18:27	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 18:27	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 18:27	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 18:27	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 18:27	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 18:27	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 18:27	10
2-Butanone (MEK)	<100 *		100	13.2	ug/L			10/11/13 18:27	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 18:27	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 18:27	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 18:27	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 18:27	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 18:27	10
Acetone	<500		500	30.0	ug/L			10/11/13 18:27	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 18:27	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 18:27	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 18:27	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 18:27	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 18:27	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 18:27	10
Chlorobenzene	82.4		10.0	7.50	ug/L			10/11/13 18:27	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 18:27	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 18:27	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 18:27	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 18:27	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 18:27	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 18:27	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 18:27	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 18:27	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 18:27	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 18:27	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 18:27	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 18:27	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 18:27	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 18:27	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 18:27	10
Methyl tert-butyl ether	7.93 J		10.0	1.60	ug/L			10/11/13 18:27	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-5

Lab Sample ID: 480-47378-3

Date Collected: 10/03/13 10:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 18:27	10
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 18:27	10
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 18:27	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 18:27	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 18:27	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 18:27	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 18:27	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 18:27	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 18:27	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 18:27	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 18:27	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 18:27	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 18:27	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 18:27	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 18:27	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 18:27	10
Trichloroethene	<10.0		10.0	4.60	ug/L			10/11/13 18:27	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 18:27	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 18:27	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 18:27	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	93		70 - 130		10/11/13 18:27	10
1,2-Dichloroethane-d4 (Surr)	94		70 - 130		10/11/13 18:27	10
4-Bromofluorobenzene (Surr)	103		70 - 130		10/11/13 18:27	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 12:32	10
C9-C10 Aromatics	9.38	J	50.0	5.00	ug/L			10/08/13 12:32	10
C9-C12 Aliphatics (unadjusted)	26.8	J	50.0	15.0	ug/L			10/08/13 12:32	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	94		70 - 130		10/08/13 12:32	10
2,5-Dibromotoluene (pid)	97		70 - 130		10/08/13 12:32	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Acenaphthene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Acenaphthylene (TSP)	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Anthracene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Benzo[a]anthracene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Benzo[a]pyrene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Benzo[b]fluoranthene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Benzo[g,h,i]perylene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-5

Lab Sample ID: 480-47378-3

Date Collected: 10/03/13 10:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Chrysene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Dibenz(a,h)anthracene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Fluoranthene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Fluorene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Indeno[1,2,3-cd]pyrene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Naphthalene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Phenanthrene	2.52	J	9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
Pyrene	<9.57		9.57	1.91	ug/L		10/11/13 11:32	10/12/13 17:29	1
C11-C22 Aromatics (unadjusted)	22.8	J B	47.9	9.57	ug/L		10/11/13 11:32	10/12/13 17:29	1
C19-C36 Aliphatics	<47.9		47.9	9.57	ug/L		10/11/13 11:32	10/12/13 17:29	1
C9-C18 Aliphatics	19.5	J B	47.9	9.57	ug/L		10/11/13 11:32	10/12/13 17:29	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	48		40 - 140				10/11/13 11:32	10/12/13 17:29	1
2-Bromonaphthalene	85		40 - 140				10/11/13 11:32	10/12/13 17:29	1
2-Fluorobiphenyl	101		40 - 140				10/11/13 11:32	10/12/13 17:29	1
o-Terphenyl	83		40 - 140				10/11/13 11:32	10/12/13 17:29	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 19:54	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 19:54	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 19:54	1
Barium	0.396		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 19:54	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 19:54	1
Nickel	0.00251	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 19:54	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 19:54	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 19:54	1
Arsenic	<0.0100		0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 19:54	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 19:54	1
Zinc	0.0107	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 19:54	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 19:54	1
Chromium	0.00160	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 19:54	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:20	1

Client Sample ID: WCMW-9

Lab Sample ID: 480-47378-4

Date Collected: 10/03/13 10:58

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 18:52	10
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 18:52	10
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 18:52	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-9

Lab Sample ID: 480-47378-4

Date Collected: 10/03/13 10:58

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 18:52	10
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 18:52	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 18:52	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 18:52	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 18:52	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 18:52	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 18:52	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 18:52	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 18:52	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 18:52	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 18:52	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 18:52	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 18:52	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 18:52	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 18:52	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 18:52	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 18:52	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 18:52	10
2-Butanone (MEK)	<100	*	100	13.2	ug/L			10/11/13 18:52	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 18:52	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 18:52	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 18:52	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 18:52	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 18:52	10
Acetone	<500		500	30.0	ug/L			10/11/13 18:52	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 18:52	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 18:52	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 18:52	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 18:52	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 18:52	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 18:52	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 18:52	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 18:52	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 18:52	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 18:52	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 18:52	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 18:52	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 18:52	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 18:52	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 18:52	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 18:52	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 18:52	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 18:52	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 18:52	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 18:52	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 18:52	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 18:52	10
Methyl tert-butyl ether	3.60	J	10.0	1.60	ug/L			10/11/13 18:52	10
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 18:52	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-9

Lab Sample ID: 480-47378-4

Date Collected: 10/03/13 10:58

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 18:52	10
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 18:52	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 18:52	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 18:52	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 18:52	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 18:52	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 18:52	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 18:52	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 18:52	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 18:52	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 18:52	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 18:52	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 18:52	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 18:52	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 18:52	10
Trichloroethene	5.33 J		10.0	4.60	ug/L			10/11/13 18:52	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 18:52	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 18:52	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 18:52	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	94		70 - 130		10/11/13 18:52	10
1,2-Dichloroethane-d4 (Surr)	94		70 - 130		10/11/13 18:52	10
4-Bromofluorobenzene (Surr)	106		70 - 130		10/11/13 18:52	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 13:10	10
C9-C10 Aromatics	<50.0		50.0	5.00	ug/L			10/08/13 13:10	10
C9-C12 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 13:10	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	95		70 - 130		10/08/13 13:10	10
2,5-Dibromotoluene (pid)	98		70 - 130		10/08/13 13:10	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Acenaphthene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Acenaphthylene (TSP)	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Anthracene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Benzo[a]anthracene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Benzo[a]pyrene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Benzo[b]fluoranthene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Benzo[g,h,i]perylene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Benzo[k]fluoranthene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-9

Lab Sample ID: 480-47378-4

Date Collected: 10/03/13 10:58

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Dibenz(a,h)anthracene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Fluoranthene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Fluorene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Indeno[1,2,3-cd]pyrene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Naphthalene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Phenanthrene	1.93	J	9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
Pyrene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 17:58	1
C11-C22 Aromatics (unadjusted)	15.9	J B	47.3	9.47	ug/L		10/11/13 11:32	10/12/13 17:58	1
C19-C36 Aliphatics	9.61	J	47.3	9.47	ug/L		10/11/13 11:32	10/12/13 17:58	1
C9-C18 Aliphatics	14.1	J B	47.3	9.47	ug/L		10/11/13 11:32	10/12/13 17:58	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	35	X	40 - 140				10/11/13 11:32	10/12/13 17:58	1
2-Bromonaphthalene	83		40 - 140				10/11/13 11:32	10/12/13 17:58	1
2-Fluorobiphenyl	101		40 - 140				10/11/13 11:32	10/12/13 17:58	1
o-Terphenyl	51		40 - 140				10/11/13 11:32	10/12/13 17:58	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 19:57	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 19:57	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 19:57	1
Barium	0.337		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 19:57	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 19:57	1
Nickel	0.00862	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 19:57	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 19:57	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 19:57	1
Arsenic	0.00641	J	0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 19:57	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 19:57	1
Zinc	0.0638		0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 19:57	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 19:57	1
Chromium	0.00160	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 19:57	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:21	1

Client Sample ID: WCMW-2

Lab Sample ID: 480-47378-5

Date Collected: 10/03/13 11:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 19:17	10
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 19:17	10
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 19:17	10
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 19:17	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-2

Lab Sample ID: 480-47378-5

Date Collected: 10/03/13 11:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 19:17	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 19:17	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 19:17	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 19:17	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 19:17	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 19:17	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 19:17	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 19:17	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 19:17	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 19:17	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 19:17	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 19:17	10
1,3-Dichlorobenzene	11.3		10.0	7.80	ug/L			10/11/13 19:17	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 19:17	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 19:17	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 19:17	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 19:17	10
2-Butanone (MEK)	<100	*	100	13.2	ug/L			10/11/13 19:17	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 19:17	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 19:17	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 19:17	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 19:17	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 19:17	10
Acetone	<500		500	30.0	ug/L			10/11/13 19:17	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 19:17	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 19:17	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 19:17	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 19:17	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 19:17	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 19:17	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 19:17	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 19:17	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 19:17	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 19:17	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 19:17	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 19:17	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 19:17	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 19:17	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 19:17	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 19:17	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 19:17	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 19:17	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 19:17	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 19:17	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 19:17	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 19:17	10
Methyl tert-butyl ether	4.08	J	10.0	1.60	ug/L			10/11/13 19:17	10
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 19:17	10
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 19:17	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-2

Lab Sample ID: 480-47378-5

Date Collected: 10/03/13 11:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 19:17	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 19:17	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 19:17	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 19:17	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 19:17	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 19:17	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 19:17	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 19:17	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 19:17	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 19:17	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 19:17	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 19:17	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 19:17	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 19:17	10
Trichloroethene	<10.0		10.0	4.60	ug/L			10/11/13 19:17	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 19:17	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 19:17	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 19:17	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	91		70 - 130		10/11/13 19:17	10
1,2-Dichloroethane-d4 (Surr)	95		70 - 130		10/11/13 19:17	10
4-Bromofluorobenzene (Surr)	104		70 - 130		10/11/13 19:17	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 13:51	10
C9-C10 Aromatics	10.0	J	50.0	5.00	ug/L			10/08/13 13:51	10
C9-C12 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 13:51	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	95		70 - 130		10/08/13 13:51	10
2,5-Dibromotoluene (pid)	96		70 - 130		10/08/13 13:51	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Acenaphthene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Acenaphthylene (TSP)	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Anthracene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Benzo[a]anthracene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Benzo[a]pyrene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Benzo[b]fluoranthene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Benzo[g,h,i]perylene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Benzo[k]fluoranthene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Chrysene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-2

Lab Sample ID: 480-47378-5

Date Collected: 10/03/13 11:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Fluoranthene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Fluorene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Indeno[1,2,3-cd]pyrene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Naphthalene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Phenanthrene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
Pyrene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 18:28	1
C11-C22 Aromatics (unadjusted)	11.9	J B	47.5	9.49	ug/L		10/11/13 11:32	10/12/13 18:28	1
C19-C36 Aliphatics	19.6	J	47.5	9.49	ug/L		10/11/13 11:32	10/12/13 18:28	1
C9-C18 Aliphatics	17.6	J B	47.5	9.49	ug/L		10/11/13 11:32	10/12/13 18:28	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	29	X	40 - 140				10/11/13 11:32	10/12/13 18:28	1
2-Bromonaphthalene	87		40 - 140				10/11/13 11:32	10/12/13 18:28	1
2-Fluorobiphenyl	103		40 - 140				10/11/13 11:32	10/12/13 18:28	1
o-Terphenyl	54		40 - 140				10/11/13 11:32	10/12/13 18:28	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 20:00	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 20:00	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 20:00	1
Barium	0.152		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 20:00	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 20:00	1
Nickel	0.00358	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 20:00	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 20:00	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 20:00	1
Arsenic	0.00774	J	0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 20:00	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 20:00	1
Zinc	0.0226	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 20:00	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 20:00	1
Chromium	0.00163	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 20:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:27	1

Client Sample ID: WCMW-7

Lab Sample ID: 480-47378-6

Date Collected: 10/03/13 12:17

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<5.00		5.00	1.75	ug/L			10/11/13 19:43	5
1,1,1-Trichloroethane	<5.00		5.00	4.10	ug/L			10/11/13 19:43	5
1,1,2,2-Tetrachloroethane	<2.50		2.50	1.05	ug/L			10/11/13 19:43	5
1,1,2-Trichloroethane	<5.00		5.00	1.15	ug/L			10/11/13 19:43	5
1,1-Dichloroethane	<5.00		5.00	1.90	ug/L			10/11/13 19:43	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-7

Lab Sample ID: 480-47378-6

Date Collected: 10/03/13 12:17

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<5.00		5.00	1.45	ug/L			10/11/13 19:43	5
1,1-Dichloropropene	<5.00		5.00	3.60	ug/L			10/11/13 19:43	5
1,2,3-Trichlorobenzene	<5.00		5.00	2.05	ug/L			10/11/13 19:43	5
1,2,3-Trichloropropane	<5.00		5.00	4.45	ug/L			10/11/13 19:43	5
1,2,4-Trichlorobenzene	<5.00		5.00	2.05	ug/L			10/11/13 19:43	5
1,2,4-Trimethylbenzene	<5.00		5.00	3.75	ug/L			10/11/13 19:43	5
1,2-Dibromo-3-Chloropropane	<25.0		25.0	1.95	ug/L			10/11/13 19:43	5
1,2-Dichlorobenzene	<5.00		5.00	3.95	ug/L			10/11/13 19:43	5
1,2-Dichloroethane	<5.00		5.00	1.05	ug/L			10/11/13 19:43	5
1,2-Dichloropropane	<5.00		5.00	3.60	ug/L			10/11/13 19:43	5
1,3,5-Trimethylbenzene	<5.00		5.00	3.85	ug/L			10/11/13 19:43	5
1,3-Dichlorobenzene	<5.00		5.00	3.90	ug/L			10/11/13 19:43	5
1,3-Dichloropropane	<5.00		5.00	3.75	ug/L			10/11/13 19:43	5
1,4-Dichlorobenzene	<5.00		5.00	4.20	ug/L			10/11/13 19:43	5
1,4-Dioxane	<250		250	46.6	ug/L			10/11/13 19:43	5
2,2-Dichloropropane	<5.00		5.00	2.00	ug/L			10/11/13 19:43	5
2-Butanone (MEK)	<50.0	*	50.0	6.60	ug/L			10/11/13 19:43	5
2-Chlorotoluene	<5.00		5.00	4.30	ug/L			10/11/13 19:43	5
2-Hexanone	<50.0		50.0	6.20	ug/L			10/11/13 19:43	5
4-Chlorotoluene	<5.00		5.00	4.20	ug/L			10/11/13 19:43	5
4-Isopropyltoluene	<5.00		5.00	1.55	ug/L			10/11/13 19:43	5
4-Methyl-2-pentanone (MIBK)	<50.0		50.0	10.5	ug/L			10/11/13 19:43	5
Acetone	<250		250	15.0	ug/L			10/11/13 19:43	5
Benzene	<5.00		5.00	2.05	ug/L			10/11/13 19:43	5
Bromobenzene	<5.00		5.00	4.00	ug/L			10/11/13 19:43	5
Bromoform	<5.00		5.00	1.30	ug/L			10/11/13 19:43	5
Bromomethane	<10.0		10.0	3.45	ug/L			10/11/13 19:43	5
Carbon disulfide	<50.0		50.0	0.950	ug/L			10/11/13 19:43	5
Carbon tetrachloride	<5.00		5.00	1.35	ug/L			10/11/13 19:43	5
Chlorobenzene	<5.00		5.00	3.75	ug/L			10/11/13 19:43	5
Chlorobromomethane	<5.00		5.00	4.35	ug/L			10/11/13 19:43	5
Chlorodibromomethane	<2.50		2.50	1.60	ug/L			10/11/13 19:43	5
Chloroethane	<10.0		10.0	1.60	ug/L			10/11/13 19:43	5
Chloroform	<5.00		5.00	1.70	ug/L			10/11/13 19:43	5
Chloromethane	<10.0		10.0	1.75	ug/L			10/11/13 19:43	5
cis-1,2-Dichloroethene	86.0		5.00	4.05	ug/L			10/11/13 19:43	5
cis-1,3-Dichloropropene	<2.00		2.00	1.80	ug/L			10/11/13 19:43	5
Dichlorobromomethane	<2.50		2.50	1.95	ug/L			10/11/13 19:43	5
Dichlorodifluoromethane	<5.00		5.00	3.40	ug/L			10/11/13 19:43	5
Ethyl ether	<5.00		5.00	3.60	ug/L			10/11/13 19:43	5
Ethylbenzene	<5.00		5.00	3.70	ug/L			10/11/13 19:43	5
Ethylene Dibromide	<5.00		5.00	3.65	ug/L			10/11/13 19:43	5
Hexachlorobutadiene	<2.00		2.00	1.40	ug/L			10/11/13 19:43	5
Isopropyl ether	<50.0		50.0	2.95	ug/L			10/11/13 19:43	5
Isopropylbenzene	<5.00		5.00	3.95	ug/L			10/11/13 19:43	5
Methyl tert-butyl ether	<5.00		5.00	0.800	ug/L			10/11/13 19:43	5
Methylene Chloride	<5.00		5.00	2.20	ug/L			10/11/13 19:43	5
m-Xylene & p-Xylene	<10.0		10.0	3.30	ug/L			10/11/13 19:43	5
Naphthalene	<25.0		25.0	2.15	ug/L			10/11/13 19:43	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-7

Lab Sample ID: 480-47378-6

Date Collected: 10/03/13 12:17

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	<5.00		5.00	3.20	ug/L			10/11/13 19:43	5
N-Propylbenzene	<5.00		5.00	3.45	ug/L			10/11/13 19:43	5
o-Xylene	<5.00		5.00	3.80	ug/L			10/11/13 19:43	5
sec-Butylbenzene	<5.00		5.00	3.75	ug/L			10/11/13 19:43	5
Styrene	<5.00		5.00	3.65	ug/L			10/11/13 19:43	5
Tert-amyl methyl ether	<25.0		25.0	1.35	ug/L			10/11/13 19:43	5
Tert-butyl ethyl ether	<25.0		25.0	1.47	ug/L			10/11/13 19:43	5
tert-Butylbenzene	<5.00		5.00	4.05	ug/L			10/11/13 19:43	5
Tetrachloroethene	<5.00		5.00	1.80	ug/L			10/11/13 19:43	5
Tetrahydrofuran	<50.0		50.0	6.25	ug/L			10/11/13 19:43	5
Toluene	<5.00		5.00	2.55	ug/L			10/11/13 19:43	5
trans-1,2-Dichloroethene	<5.00		5.00	4.50	ug/L			10/11/13 19:43	5
trans-1,3-Dichloropropene	<2.00		2.00	1.85	ug/L			10/11/13 19:43	5
Trichloroethene	23.9		5.00	2.30	ug/L			10/11/13 19:43	5
Trichlorofluoromethane	<5.00		5.00	4.40	ug/L			10/11/13 19:43	5
Vinyl chloride	<5.00		5.00	4.50	ug/L			10/11/13 19:43	5
Dibromomethane	<5.00		5.00	2.05	ug/L			10/11/13 19:43	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	91		70 - 130		10/11/13 19:43	5
1,2-Dichloroethane-d4 (Surr)	95		70 - 130		10/11/13 19:43	5
4-Bromofluorobenzene (Surr)	102		70 - 130		10/11/13 19:43	5

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 14:36	10
C9-C10 Aromatics	<50.0		50.0	5.00	ug/L			10/08/13 14:36	10
C9-C12 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 14:36	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	98		70 - 130		10/08/13 14:36	10
2,5-Dibromotoluene (pid)	99		70 - 130		10/08/13 14:36	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Acenaphthene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Acenaphthylene (TSP)	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Anthracene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Benzo[a]anthracene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Benzo[a]pyrene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Benzo[b]fluoranthene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Benzo[g,h,i]perylene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Benzo[k]fluoranthene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Chrysene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Dibenz(a,h)anthracene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-7

Lab Sample ID: 480-47378-6

Date Collected: 10/03/13 12:17

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Fluorene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Indeno[1,2,3-cd]pyrene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Naphthalene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Phenanthrene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
Pyrene	<9.47		9.47	1.89	ug/L		10/11/13 11:32	10/12/13 18:57	1
C11-C22 Aromatics (unadjusted)	16.7	J B	47.3	9.47	ug/L		10/11/13 11:32	10/12/13 18:57	1
C19-C36 Aliphatics	16.5	J	47.3	9.47	ug/L		10/11/13 11:32	10/12/13 18:57	1
C9-C18 Aliphatics	11.9	J B	47.3	9.47	ug/L		10/11/13 11:32	10/12/13 18:57	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	46		40 - 140				10/11/13 11:32	10/12/13 18:57	1
2-Bromonaphthalene	83		40 - 140				10/11/13 11:32	10/12/13 18:57	1
2-Fluorobiphenyl	98		40 - 140				10/11/13 11:32	10/12/13 18:57	1
o-Terphenyl	74		40 - 140				10/11/13 11:32	10/12/13 18:57	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 20:02	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 20:02	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 20:02	1
Barium	0.420		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 20:02	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 20:02	1
Nickel	0.00376	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 20:02	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 20:02	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 20:02	1
Arsenic	<0.0100		0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 20:02	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 20:02	1
Zinc	0.0130	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 20:02	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 20:02	1
Chromium	0.00176	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 20:02	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:28	1

Client Sample ID: WCMW-907

Lab Sample ID: 480-47378-7

Date Collected: 10/03/13 12:17

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Acenaphthene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Acenaphthylene (TSP)	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Anthracene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Benzo[a]anthracene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Benzo[a]pyrene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-907

Lab Sample ID: 480-47378-7

Date Collected: 10/03/13 12:17

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Benzo[g,h,i]perylene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Benzo[k]fluoranthene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Chrysene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Dibenz(a,h)anthracene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Fluoranthene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Fluorene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Indeno[1,2,3-cd]pyrene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Naphthalene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Phenanthrene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
Pyrene	<9.45		9.45	1.89	ug/L		10/11/13 11:32	10/12/13 19:27	1
C11-C22 Aromatics (unadjusted)	15.4	J B	47.3	9.45	ug/L		10/11/13 11:32	10/12/13 19:27	1
C19-C36 Aliphatics	<47.3		47.3	9.45	ug/L		10/11/13 11:32	10/12/13 19:27	1
C9-C18 Aliphatics	12.9	J B	47.3	9.45	ug/L		10/11/13 11:32	10/12/13 19:27	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	44		40 - 140				10/11/13 11:32	10/12/13 19:27	1
2-Bromonaphthalene	83		40 - 140				10/11/13 11:32	10/12/13 19:27	1
2-Fluorobiphenyl	96		40 - 140				10/11/13 11:32	10/12/13 19:27	1
o-Terphenyl	71		40 - 140				10/11/13 11:32	10/12/13 19:27	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 20:22	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 20:22	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 20:22	1
Barium	0.417		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 20:22	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 20:22	1
Nickel	0.00138	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 20:22	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 20:22	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 20:22	1
Arsenic	<0.0100		0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 20:22	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 20:22	1
Zinc	0.00736	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 20:22	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 20:22	1
Chromium	0.00181	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 20:22	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:36	1

Client Sample ID: MW-2R

Lab Sample ID: 480-47378-8

Date Collected: 10/03/13 12:27

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 20:08	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-2R

Lab Sample ID: 480-47378-8

Date Collected: 10/03/13 12:27

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 20:08	10
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 20:08	10
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 20:08	10
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 20:08	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 20:08	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 20:08	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 20:08	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 20:08	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 20:08	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 20:08	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 20:08	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 20:08	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 20:08	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 20:08	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 20:08	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 20:08	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 20:08	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 20:08	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 20:08	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 20:08	10
2-Butanone (MEK)	<100 *		100	13.2	ug/L			10/11/13 20:08	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 20:08	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 20:08	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 20:08	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 20:08	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 20:08	10
Acetone	<500		500	30.0	ug/L			10/11/13 20:08	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 20:08	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 20:08	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 20:08	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 20:08	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 20:08	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 20:08	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 20:08	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 20:08	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 20:08	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 20:08	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 20:08	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 20:08	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 20:08	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 20:08	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 20:08	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 20:08	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 20:08	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 20:08	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 20:08	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 20:08	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 20:08	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 20:08	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-2R

Lab Sample ID: 480-47378-8

Date Collected: 10/03/13 12:27

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	<10.0		10.0	1.60	ug/L			10/11/13 20:08	10
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 20:08	10
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 20:08	10
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 20:08	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 20:08	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 20:08	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 20:08	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 20:08	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 20:08	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 20:08	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 20:08	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 20:08	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 20:08	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 20:08	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 20:08	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 20:08	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 20:08	10
Trichloroethene	<10.0		10.0	4.60	ug/L			10/11/13 20:08	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 20:08	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 20:08	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 20:08	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	91		70 - 130		10/11/13 20:08	10
1,2-Dichloroethane-d4 (Surr)	92		70 - 130		10/11/13 20:08	10
4-Bromofluorobenzene (Surr)	103		70 - 130		10/11/13 20:08	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 15:15	10
C9-C10 Aromatics	<50.0		50.0	5.00	ug/L			10/08/13 15:15	10
C9-C12 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 15:15	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	96		70 - 130		10/08/13 15:15	10
2,5-Dibromotoluene (pid)	97		70 - 130		10/08/13 15:15	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Acenaphthene	8.64	J	9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Acenaphthylene (TSP)	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Anthracene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Benzo[a]anthracene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Benzo[a]pyrene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Benzo[b]fluoranthene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-2R

Lab Sample ID: 480-47378-8

Date Collected: 10/03/13 12:27

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Benzo[k]fluoranthene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Chrysene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Dibenz[a,h]anthracene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Fluoranthene	2.34	J	9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Fluorene	6.92	J	9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Indeno[1,2,3-cd]pyrene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Naphthalene	3.16	J	9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Phenanthrene	11.3		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
Pyrene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/14/13 13:32	1
C11-C22 Aromatics (unadjusted)	77.0	B	47.6	9.52	ug/L		10/11/13 11:32	10/14/13 13:32	1
C19-C36 Aliphatics	<47.6		47.6	9.52	ug/L		10/11/13 11:32	10/14/13 13:32	1
C9-C18 Aliphatics	13.2	J B	47.6	9.52	ug/L		10/11/13 11:32	10/14/13 13:32	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	48		40 - 140				10/11/13 11:32	10/14/13 13:32	1
2-Bromonaphthalene	86		40 - 140				10/11/13 11:32	10/14/13 13:32	1
2-Fluorobiphenyl	104		40 - 140				10/11/13 11:32	10/14/13 13:32	1
o-Terphenyl	74		40 - 140				10/11/13 11:32	10/14/13 13:32	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 20:25	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 20:25	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 20:25	1
Barium	0.248		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 20:25	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 20:25	1
Nickel	0.00335	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 20:25	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 20:25	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 20:25	1
Arsenic	<0.0100		0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 20:25	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 20:25	1
Zinc	0.00270	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 20:25	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 20:25	1
Chromium	0.00131	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 20:25	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:38	1

Client Sample ID: WCMW-8

Lab Sample ID: 480-47378-9

Date Collected: 10/03/13 14:07

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 20:33	10
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 20:33	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-8

Lab Sample ID: 480-47378-9

Date Collected: 10/03/13 14:07

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 20:33	10
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 20:33	10
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 20:33	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 20:33	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 20:33	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 20:33	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 20:33	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 20:33	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 20:33	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 20:33	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 20:33	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 20:33	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 20:33	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 20:33	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 20:33	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 20:33	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 20:33	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 20:33	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 20:33	10
2-Butanone (MEK)	<100 *		100	13.2	ug/L			10/11/13 20:33	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 20:33	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 20:33	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 20:33	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 20:33	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 20:33	10
Acetone	<500		500	30.0	ug/L			10/11/13 20:33	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 20:33	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 20:33	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 20:33	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 20:33	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 20:33	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 20:33	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 20:33	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 20:33	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 20:33	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 20:33	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 20:33	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 20:33	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 20:33	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 20:33	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 20:33	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 20:33	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 20:33	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 20:33	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 20:33	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 20:33	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 20:33	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 20:33	10
Methyl tert-butyl ether	<10.0		10.0	1.60	ug/L			10/11/13 20:33	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-8

Lab Sample ID: 480-47378-9

Date Collected: 10/03/13 14:07

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 20:33	10
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 20:33	10
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 20:33	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 20:33	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 20:33	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 20:33	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 20:33	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 20:33	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 20:33	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 20:33	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 20:33	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 20:33	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 20:33	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 20:33	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 20:33	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 20:33	10
Trichloroethene	<10.0		10.0	4.60	ug/L			10/11/13 20:33	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 20:33	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 20:33	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 20:33	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	92		70 - 130		10/11/13 20:33	10
1,2-Dichloroethane-d4 (Surr)	95		70 - 130		10/11/13 20:33	10
4-Bromofluorobenzene (Surr)	101		70 - 130		10/11/13 20:33	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 16:31	10
C9-C10 Aromatics	<50.0		50.0	5.00	ug/L			10/08/13 16:31	10
C9-C12 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 16:31	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	94		70 - 130		10/08/13 16:31	10
2,5-Dibromotoluene (pid)	96		70 - 130		10/08/13 16:31	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Acenaphthene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Acenaphthylene (TSP)	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Anthracene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Benzo[a]anthracene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Benzo[a]pyrene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Benzo[b]fluoranthene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Benzo[g,h,i]perylene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-8

Lab Sample ID: 480-47378-9

Date Collected: 10/03/13 14:07

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Chrysene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Dibenz(a,h)anthracene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Fluoranthene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Fluorene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Indeno[1,2,3-cd]pyrene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Naphthalene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Phenanthrene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
Pyrene	<9.49		9.49	1.90	ug/L		10/11/13 11:32	10/12/13 20:56	1
C11-C22 Aromatics (unadjusted)	19.3	J B	47.4	9.49	ug/L		10/11/13 11:32	10/12/13 20:56	1
C19-C36 Aliphatics	<47.4		47.4	9.49	ug/L		10/11/13 11:32	10/12/13 20:56	1
C9-C18 Aliphatics	<47.4		47.4	9.49	ug/L		10/11/13 11:32	10/12/13 20:56	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	44		40 - 140				10/11/13 11:32	10/12/13 20:56	1
2-Bromonaphthalene	82		40 - 140				10/11/13 11:32	10/12/13 20:56	1
2-Fluorobiphenyl	96		40 - 140				10/11/13 11:32	10/12/13 20:56	1
o-Terphenyl	68		40 - 140				10/11/13 11:32	10/12/13 20:56	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 20:28	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 20:28	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 20:28	1
Barium	0.335		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 20:28	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 20:28	1
Nickel	<0.0100		0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 20:28	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 20:28	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 20:28	1
Arsenic	<0.0100		0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 20:28	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 20:28	1
Zinc	0.00301	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 20:28	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 20:28	1
Chromium	0.00133	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 20:28	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:39	1

Client Sample ID: WCMW-11

Lab Sample ID: 480-47378-10

Date Collected: 10/03/13 14:20

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 20:59	10
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 20:59	10
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 20:59	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-11

Lab Sample ID: 480-47378-10

Date Collected: 10/03/13 14:20

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 20:59	10
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 20:59	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 20:59	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 20:59	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 20:59	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 20:59	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 20:59	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 20:59	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 20:59	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 20:59	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 20:59	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 20:59	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 20:59	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 20:59	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 20:59	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 20:59	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 20:59	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 20:59	10
2-Butanone (MEK)	<100	*	100	13.2	ug/L			10/11/13 20:59	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 20:59	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 20:59	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 20:59	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 20:59	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 20:59	10
Acetone	<500		500	30.0	ug/L			10/11/13 20:59	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 20:59	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 20:59	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 20:59	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 20:59	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 20:59	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 20:59	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 20:59	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 20:59	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 20:59	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 20:59	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 20:59	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 20:59	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 20:59	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 20:59	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 20:59	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 20:59	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 20:59	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 20:59	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 20:59	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 20:59	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 20:59	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 20:59	10
Methyl tert-butyl ether	<10.0		10.0	1.60	ug/L			10/11/13 20:59	10
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 20:59	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-11

Lab Sample ID: 480-47378-10

Date Collected: 10/03/13 14:20

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 20:59	10
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 20:59	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 20:59	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 20:59	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 20:59	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 20:59	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 20:59	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 20:59	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 20:59	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 20:59	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 20:59	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 20:59	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 20:59	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 20:59	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 20:59	10
Trichloroethene	<10.0		10.0	4.60	ug/L			10/11/13 20:59	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 20:59	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 20:59	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 20:59	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	91		70 - 130		10/11/13 20:59	10
1,2-Dichloroethane-d4 (Surr)	95		70 - 130		10/11/13 20:59	10
4-Bromofluorobenzene (Surr)	102		70 - 130		10/11/13 20:59	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 17:10	10
C9-C10 Aromatics	<50.0		50.0	5.00	ug/L			10/08/13 17:10	10
C9-C12 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 17:10	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	94		70 - 130		10/08/13 17:10	10
2,5-Dibromotoluene (pid)	97		70 - 130		10/08/13 17:10	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Acenaphthene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Acenaphthylene (TSP)	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Anthracene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Benzo[a]anthracene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Benzo[a]pyrene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Benzo[b]fluoranthene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Benzo[g,h,i]perylene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Benzo[k]fluoranthene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-11

Lab Sample ID: 480-47378-10

Date Collected: 10/03/13 14:20

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Dibenz(a,h)anthracene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Fluoranthene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Fluorene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Indeno[1,2,3-cd]pyrene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Naphthalene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Phenanthrene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
Pyrene	<11.0		11.0	2.21	ug/L		10/11/13 11:32	10/12/13 21:25	1
C11-C22 Aromatics (unadjusted)	16.0	J B	55.2	11.0	ug/L		10/11/13 11:32	10/12/13 21:25	1
C19-C36 Aliphatics	15.8	J	55.2	11.0	ug/L		10/11/13 11:32	10/12/13 21:25	1
C9-C18 Aliphatics	<55.2		55.2	11.0	ug/L		10/11/13 11:32	10/12/13 21:25	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	46		40 - 140				10/11/13 11:32	10/12/13 21:25	1
2-Bromonaphthalene	87		40 - 140				10/11/13 11:32	10/12/13 21:25	1
2-Fluorobiphenyl	99		40 - 140				10/11/13 11:32	10/12/13 21:25	1
o-Terphenyl	67		40 - 140				10/11/13 11:32	10/12/13 21:25	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 20:30	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 20:30	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 20:30	1
Barium	0.160		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 20:30	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 20:30	1
Nickel	0.00389	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 20:30	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 20:30	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 20:30	1
Arsenic	0.00563	J	0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 20:30	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 20:30	1
Zinc	0.0132	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 20:30	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 20:30	1
Chromium	0.00172	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 20:30	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:41	1

Client Sample ID: WCMW-4

Lab Sample ID: 480-47378-11

Date Collected: 10/03/13 14:52

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 21:24	10
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 21:24	10
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 21:24	10
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 21:24	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-4

Lab Sample ID: 480-47378-11

Date Collected: 10/03/13 14:52

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 21:24	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 21:24	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 21:24	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 21:24	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 21:24	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 21:24	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 21:24	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 21:24	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 21:24	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 21:24	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 21:24	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 21:24	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 21:24	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 21:24	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 21:24	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 21:24	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 21:24	10
2-Butanone (MEK)	<100	*	100	13.2	ug/L			10/11/13 21:24	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 21:24	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 21:24	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 21:24	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 21:24	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 21:24	10
Acetone	<500		500	30.0	ug/L			10/11/13 21:24	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 21:24	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 21:24	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 21:24	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 21:24	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 21:24	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 21:24	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 21:24	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 21:24	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 21:24	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 21:24	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 21:24	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 21:24	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 21:24	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 21:24	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 21:24	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 21:24	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 21:24	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 21:24	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 21:24	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 21:24	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 21:24	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 21:24	10
Methyl tert-butyl ether	<10.0		10.0	1.60	ug/L			10/11/13 21:24	10
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 21:24	10
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 21:24	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-4

Lab Sample ID: 480-47378-11

Date Collected: 10/03/13 14:52

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 21:24	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 21:24	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 21:24	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 21:24	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 21:24	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 21:24	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 21:24	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 21:24	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 21:24	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 21:24	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 21:24	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 21:24	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 21:24	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 21:24	10
Trichloroethene	<10.0		10.0	4.60	ug/L			10/11/13 21:24	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 21:24	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 21:24	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 21:24	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	90		70 - 130		10/11/13 21:24	10
1,2-Dichloroethane-d4 (Surr)	93		70 - 130		10/11/13 21:24	10
4-Bromofluorobenzene (Surr)	100		70 - 130		10/11/13 21:24	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 17:48	10
C9-C10 Aromatics	<50.0		50.0	5.00	ug/L			10/08/13 17:48	10
C9-C12 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 17:48	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	94		70 - 130		10/08/13 17:48	10
2,5-Dibromotoluene (pid)	97		70 - 130		10/08/13 17:48	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Acenaphthene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Acenaphthylene (TSP)	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Anthracene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Benzo[a]anthracene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Benzo[a]pyrene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Benzo[b]fluoranthene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Benzo[g,h,i]perylene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Benzo[k]fluoranthene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Chrysene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-4

Lab Sample ID: 480-47378-11

Date Collected: 10/03/13 14:52

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Fluoranthene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Fluorene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Indeno[1,2,3-cd]pyrene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Naphthalene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Phenanthrene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
Pyrene	<9.50		9.50	1.90	ug/L		10/11/13 11:32	10/12/13 21:54	1
C11-C22 Aromatics (unadjusted)	12.1	J B	47.5	9.50	ug/L		10/11/13 11:32	10/12/13 21:54	1
C19-C36 Aliphatics	11.4	J	47.5	9.50	ug/L		10/11/13 11:32	10/12/13 21:54	1
C9-C18 Aliphatics	10.8	J B	47.5	9.50	ug/L		10/11/13 11:32	10/12/13 21:54	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	37	X	40 - 140				10/11/13 11:32	10/12/13 21:54	1
2-Bromonaphthalene	89		40 - 140				10/11/13 11:32	10/12/13 21:54	1
2-Fluorobiphenyl	105		40 - 140				10/11/13 11:32	10/12/13 21:54	1
o-Terphenyl	74		40 - 140				10/11/13 11:32	10/12/13 21:54	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 20:33	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 20:33	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 20:33	1
Barium	0.0754		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 20:33	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 20:33	1
Nickel	0.00225	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 20:33	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 20:33	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 20:33	1
Arsenic	<0.0100		0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 20:33	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 20:33	1
Zinc	0.00350	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 20:33	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 20:33	1
Chromium	0.00126	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 20:33	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:43	1

Client Sample ID: WCMW-1

Lab Sample ID: 480-47378-12

Date Collected: 10/03/13 15:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 21:49	10
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 21:49	10
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 21:49	10
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 21:49	10
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 21:49	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-1

Lab Sample ID: 480-47378-12

Date Collected: 10/03/13 15:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 21:49	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 21:49	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 21:49	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 21:49	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 21:49	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 21:49	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 21:49	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 21:49	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 21:49	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 21:49	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 21:49	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 21:49	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 21:49	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 21:49	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 21:49	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 21:49	10
2-Butanone (MEK)	<100	*	100	13.2	ug/L			10/11/13 21:49	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 21:49	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 21:49	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 21:49	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 21:49	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 21:49	10
Acetone	<500		500	30.0	ug/L			10/11/13 21:49	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 21:49	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 21:49	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 21:49	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 21:49	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 21:49	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 21:49	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 21:49	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 21:49	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 21:49	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 21:49	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 21:49	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 21:49	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 21:49	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 21:49	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 21:49	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 21:49	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 21:49	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 21:49	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 21:49	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 21:49	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 21:49	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 21:49	10
Methyl tert-butyl ether	<10.0		10.0	1.60	ug/L			10/11/13 21:49	10
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 21:49	10
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 21:49	10
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 21:49	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-1

Lab Sample ID: 480-47378-12

Date Collected: 10/03/13 15:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 21:49	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 21:49	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 21:49	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 21:49	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 21:49	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 21:49	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 21:49	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 21:49	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 21:49	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 21:49	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 21:49	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 21:49	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 21:49	10
Trichloroethene	<10.0		10.0	4.60	ug/L			10/11/13 21:49	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 21:49	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 21:49	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 21:49	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	92		70 - 130		10/11/13 21:49	10
1,2-Dichloroethane-d4 (Surr)	93		70 - 130		10/11/13 21:49	10
4-Bromofluorobenzene (Surr)	101		70 - 130		10/11/13 21:49	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 18:27	10
C9-C10 Aromatics	24.7	J	50.0	5.00	ug/L			10/08/13 18:27	10
C9-C12 Aliphatics (unadjusted)	18.4	J	50.0	15.0	ug/L			10/08/13 18:27	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	91		70 - 130		10/08/13 18:27	10
2,5-Dibromotoluene (pid)	94		70 - 130		10/08/13 18:27	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Acenaphthene	4.94	J	9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Acenaphthylene (TSP)	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Anthracene	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Benzo[a]anthracene	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Benzo[a]pyrene	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Benzo[b]fluoranthene	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Benzo[g,h,i]perylene	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Benzo[k]fluoranthene	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Chrysene	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Dibenz(a,h)anthracene	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-1

Lab Sample ID: 480-47378-12

Date Collected: 10/03/13 15:42

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Fluorene	3.78	J	9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Indeno[1,2,3-cd]pyrene	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Naphthalene	3.30	J	9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Phenanthrene	5.83	J	9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
Pyrene	<9.54		9.54	1.91	ug/L		10/11/13 11:32	10/12/13 22:24	1
C11-C22 Aromatics (unadjusted)	42.8	J B	47.7	9.54	ug/L		10/11/13 11:32	10/12/13 22:24	1
C19-C36 Aliphatics	<47.7		47.7	9.54	ug/L		10/11/13 11:32	10/12/13 22:24	1
C9-C18 Aliphatics	109	B	47.7	9.54	ug/L		10/11/13 11:32	10/12/13 22:24	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	34	X	40 - 140				10/11/13 11:32	10/12/13 22:24	1
2-Bromonaphthalene	86		40 - 140				10/11/13 11:32	10/12/13 22:24	1
2-Fluorobiphenyl	104		40 - 140				10/11/13 11:32	10/12/13 22:24	1
o-Terphenyl	73		40 - 140				10/11/13 11:32	10/12/13 22:24	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 20:35	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 20:35	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 20:35	1
Barium	0.0789		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 20:35	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 20:35	1
Nickel	0.00652	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 20:35	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 20:35	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 20:35	1
Arsenic	<0.0100		0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 20:35	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 20:35	1
Zinc	0.00426	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 20:35	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 20:35	1
Chromium	0.00117	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 20:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:48	1

Client Sample ID: MW-1R

Lab Sample ID: 480-47378-13

Date Collected: 10/03/13 15:50

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 22:15	10
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 22:15	10
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 22:15	10
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 22:15	10
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 22:15	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 22:15	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-1R

Lab Sample ID: 480-47378-13

Date Collected: 10/03/13 15:50

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 22:15	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 22:15	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 22:15	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 22:15	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 22:15	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 22:15	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 22:15	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 22:15	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 22:15	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 22:15	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 22:15	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 22:15	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 22:15	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 22:15	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 22:15	10
2-Butanone (MEK)	<100	*	100	13.2	ug/L			10/11/13 22:15	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 22:15	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 22:15	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 22:15	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 22:15	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 22:15	10
Acetone	<500		500	30.0	ug/L			10/11/13 22:15	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 22:15	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 22:15	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 22:15	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 22:15	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 22:15	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 22:15	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 22:15	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 22:15	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 22:15	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 22:15	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 22:15	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 22:15	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 22:15	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 22:15	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 22:15	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 22:15	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 22:15	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 22:15	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 22:15	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 22:15	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 22:15	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 22:15	10
Methyl tert-butyl ether	<10.0		10.0	1.60	ug/L			10/11/13 22:15	10
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 22:15	10
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 22:15	10
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 22:15	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 22:15	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-1R

Lab Sample ID: 480-47378-13

Date Collected: 10/03/13 15:50

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 22:15	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 22:15	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 22:15	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 22:15	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 22:15	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 22:15	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 22:15	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 22:15	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 22:15	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 22:15	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 22:15	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 22:15	10
Trichloroethene	<10.0		10.0	4.60	ug/L			10/11/13 22:15	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 22:15	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 22:15	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 22:15	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	89		70 - 130		10/11/13 22:15	10
1,2-Dichloroethane-d4 (Surr)	93		70 - 130		10/11/13 22:15	10
4-Bromofluorobenzene (Surr)	100		70 - 130		10/11/13 22:15	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 19:05	10
C9-C10 Aromatics	<50.0		50.0	5.00	ug/L			10/08/13 19:05	10
C9-C12 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 19:05	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	91		70 - 130		10/08/13 19:05	10
2,5-Dibromotoluene (pid)	96		70 - 130		10/08/13 19:05	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Acenaphthene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Acenaphthylene (TSP)	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Anthracene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Benzo[a]anthracene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Benzo[a]pyrene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Benzo[b]fluoranthene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Benzo[g,h,i]perylene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Benzo[k]fluoranthene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Chrysene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Dibenz(a,h)anthracene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Fluoranthene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-1R

Lab Sample ID: 480-47378-13

Date Collected: 10/03/13 15:50

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Indeno[1,2,3-cd]pyrene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Naphthalene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Phenanthrene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
Pyrene	<9.59		9.59	1.92	ug/L		10/11/13 11:32	10/12/13 22:53	1
C11-C22 Aromatics (unadjusted)	12.7	J B	48.0	9.59	ug/L		10/11/13 11:32	10/12/13 22:53	1
C19-C36 Aliphatics	24.3	J	48.0	9.59	ug/L		10/11/13 11:32	10/12/13 22:53	1
C9-C18 Aliphatics	<48.0		48.0	9.59	ug/L		10/11/13 11:32	10/12/13 22:53	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	34	X	40 - 140				10/11/13 11:32	10/12/13 22:53	1
2-Bromonaphthalene	93		40 - 140				10/11/13 11:32	10/12/13 22:53	1
2-Fluorobiphenyl	105		40 - 140				10/11/13 11:32	10/12/13 22:53	1
o-Terphenyl	75		40 - 140				10/11/13 11:32	10/12/13 22:53	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 20:38	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 20:38	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 20:38	1
Barium	0.157		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 20:38	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 20:38	1
Nickel	<0.0100		0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 20:38	1
Vanadium	0.00159	J	0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 20:38	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 20:38	1
Arsenic	<0.0100		0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 20:38	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 20:38	1
Zinc	0.00171	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 20:38	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 20:38	1
Chromium	0.00146	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 20:38	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:50	1

Client Sample ID: TB-10032013

Lab Sample ID: 480-47378-14

Date Collected: 10/03/13 12:00

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			10/11/13 22:40	1
1,1,1-Trichloroethane	<1.00		1.00	0.820	ug/L			10/11/13 22:40	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.210	ug/L			10/11/13 22:40	1
1,1,2-Trichloroethane	<1.00		1.00	0.230	ug/L			10/11/13 22:40	1
1,1-Dichloroethane	<1.00		1.00	0.380	ug/L			10/11/13 22:40	1
1,1-Dichloroethene	<1.00		1.00	0.290	ug/L			10/11/13 22:40	1
1,1-Dichloropropene	<1.00		1.00	0.720	ug/L			10/11/13 22:40	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: TB-10032013

Lab Sample ID: 480-47378-14

Date Collected: 10/03/13 12:00

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<1.00		1.00	0.410	ug/L			10/11/13 22:40	1
1,2,3-Trichloropropane	<1.00		1.00	0.890	ug/L			10/11/13 22:40	1
1,2,4-Trichlorobenzene	<1.00		1.00	0.410	ug/L			10/11/13 22:40	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.750	ug/L			10/11/13 22:40	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.390	ug/L			10/11/13 22:40	1
1,2-Dichlorobenzene	<1.00		1.00	0.790	ug/L			10/11/13 22:40	1
1,2-Dichloroethane	<1.00		1.00	0.210	ug/L			10/11/13 22:40	1
1,2-Dichloropropane	<1.00		1.00	0.720	ug/L			10/11/13 22:40	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.770	ug/L			10/11/13 22:40	1
1,3-Dichlorobenzene	<1.00		1.00	0.780	ug/L			10/11/13 22:40	1
1,3-Dichloropropane	<1.00		1.00	0.750	ug/L			10/11/13 22:40	1
1,4-Dichlorobenzene	<1.00		1.00	0.840	ug/L			10/11/13 22:40	1
1,4-Dioxane	<50.0		50.0	9.32	ug/L			10/11/13 22:40	1
2,2-Dichloropropane	<1.00		1.00	0.400	ug/L			10/11/13 22:40	1
2-Butanone (MEK)	<10.0	*	10.0	1.32	ug/L			10/11/13 22:40	1
2-Chlorotoluene	<1.00		1.00	0.860	ug/L			10/11/13 22:40	1
2-Hexanone	<10.0		10.0	1.24	ug/L			10/11/13 22:40	1
4-Chlorotoluene	<1.00		1.00	0.840	ug/L			10/11/13 22:40	1
4-Isopropyltoluene	<1.00		1.00	0.310	ug/L			10/11/13 22:40	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/11/13 22:40	1
Acetone	10.5	J	50.0	3.00	ug/L			10/11/13 22:40	1
Benzene	<1.00		1.00	0.410	ug/L			10/11/13 22:40	1
Bromobenzene	<1.00		1.00	0.800	ug/L			10/11/13 22:40	1
Bromoform	<1.00		1.00	0.260	ug/L			10/11/13 22:40	1
Bromomethane	<2.00		2.00	0.690	ug/L			10/11/13 22:40	1
Carbon disulfide	<10.0		10.0	0.190	ug/L			10/11/13 22:40	1
Carbon tetrachloride	<1.00		1.00	0.270	ug/L			10/11/13 22:40	1
Chlorobenzene	<1.00		1.00	0.750	ug/L			10/11/13 22:40	1
Chlorobromomethane	<1.00		1.00	0.870	ug/L			10/11/13 22:40	1
Chlorodibromomethane	<0.500		0.500	0.320	ug/L			10/11/13 22:40	1
Chloroethane	<2.00		2.00	0.320	ug/L			10/11/13 22:40	1
Chloroform	<1.00		1.00	0.340	ug/L			10/11/13 22:40	1
Chloromethane	<2.00		2.00	0.350	ug/L			10/11/13 22:40	1
cis-1,2-Dichloroethene	<1.00		1.00	0.810	ug/L			10/11/13 22:40	1
cis-1,3-Dichloropropene	<0.400		0.400	0.360	ug/L			10/11/13 22:40	1
Dichlorobromomethane	<0.500		0.500	0.390	ug/L			10/11/13 22:40	1
Dichlorodifluoromethane	<1.00		1.00	0.680	ug/L			10/11/13 22:40	1
Ethyl ether	<1.00		1.00	0.720	ug/L			10/11/13 22:40	1
Ethylbenzene	<1.00		1.00	0.740	ug/L			10/11/13 22:40	1
Ethylene Dibromide	<1.00		1.00	0.730	ug/L			10/11/13 22:40	1
Hexachlorobutadiene	<0.400		0.400	0.280	ug/L			10/11/13 22:40	1
Isopropyl ether	<10.0		10.0	0.590	ug/L			10/11/13 22:40	1
Isopropylbenzene	<1.00		1.00	0.790	ug/L			10/11/13 22:40	1
Methyl tert-butyl ether	<1.00		1.00	0.160	ug/L			10/11/13 22:40	1
Methylene Chloride	<1.00		1.00	0.440	ug/L			10/11/13 22:40	1
m-Xylene & p-Xylene	<2.00		2.00	0.660	ug/L			10/11/13 22:40	1
Naphthalene	<5.00		5.00	0.430	ug/L			10/11/13 22:40	1
n-Butylbenzene	<1.00		1.00	0.640	ug/L			10/11/13 22:40	1
N-Propylbenzene	<1.00		1.00	0.690	ug/L			10/11/13 22:40	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: TB-10032013

Lab Sample ID: 480-47378-14

Date Collected: 10/03/13 12:00

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<1.00		1.00	0.760	ug/L			10/11/13 22:40	1
sec-Butylbenzene	<1.00		1.00	0.750	ug/L			10/11/13 22:40	1
Styrene	<1.00		1.00	0.730	ug/L			10/11/13 22:40	1
Tert-amyl methyl ether	<5.00		5.00	0.270	ug/L			10/11/13 22:40	1
Tert-butyl ethyl ether	<5.00		5.00	0.294	ug/L			10/11/13 22:40	1
tert-Butylbenzene	<1.00		1.00	0.810	ug/L			10/11/13 22:40	1
Tetrachloroethene	<1.00		1.00	0.360	ug/L			10/11/13 22:40	1
Tetrahydrofuran	8.26	J	10.0	1.25	ug/L			10/11/13 22:40	1
Toluene	<1.00		1.00	0.510	ug/L			10/11/13 22:40	1
trans-1,2-Dichloroethene	<1.00		1.00	0.900	ug/L			10/11/13 22:40	1
trans-1,3-Dichloropropene	<0.400		0.400	0.370	ug/L			10/11/13 22:40	1
Trichloroethene	<1.00		1.00	0.460	ug/L			10/11/13 22:40	1
Trichlorofluoromethane	<1.00		1.00	0.880	ug/L			10/11/13 22:40	1
Vinyl chloride	<1.00		1.00	0.900	ug/L			10/11/13 22:40	1
Dibromomethane	<1.00		1.00	0.410	ug/L			10/11/13 22:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	94		70 - 130		10/11/13 22:40	1
1,2-Dichloroethane-d4 (Surr)	96		70 - 130		10/11/13 22:40	1
4-Bromofluorobenzene (Surr)	104		70 - 130		10/11/13 22:40	1

Client Sample ID: MW-3R

Lab Sample ID: 480-47378-15

Date Collected: 10/04/13 09:05

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 23:05	10
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 23:05	10
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 23:05	10
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 23:05	10
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 23:05	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 23:05	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 23:05	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 23:05	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 23:05	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 23:05	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 23:05	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 23:05	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 23:05	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 23:05	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 23:05	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 23:05	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 23:05	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 23:05	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 23:05	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 23:05	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 23:05	10
2-Butanone (MEK)	<100	*	100	13.2	ug/L			10/11/13 23:05	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 23:05	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-3R

Lab Sample ID: 480-47378-15

Date Collected: 10/04/13 09:05

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	<100		100	12.4	ug/L			10/11/13 23:05	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 23:05	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 23:05	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 23:05	10
Acetone	<500		500	30.0	ug/L			10/11/13 23:05	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 23:05	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 23:05	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 23:05	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 23:05	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 23:05	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 23:05	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 23:05	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 23:05	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 23:05	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 23:05	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 23:05	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 23:05	10
cis-1,2-Dichloroethene	11.7		10.0	8.10	ug/L			10/11/13 23:05	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 23:05	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 23:05	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 23:05	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 23:05	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 23:05	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 23:05	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 23:05	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 23:05	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 23:05	10
Methyl tert-butyl ether	<10.0		10.0	1.60	ug/L			10/11/13 23:05	10
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 23:05	10
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 23:05	10
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 23:05	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 23:05	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 23:05	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 23:05	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 23:05	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 23:05	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 23:05	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 23:05	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 23:05	10
Tetrachloroethene	10.4		10.0	3.60	ug/L			10/11/13 23:05	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 23:05	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 23:05	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 23:05	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 23:05	10
Trichloroethene	9.70 J		10.0	4.60	ug/L			10/11/13 23:05	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 23:05	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 23:05	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 23:05	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-3R

Lab Sample ID: 480-47378-15

Date Collected: 10/04/13 09:05

Matrix: Water

Date Received: 10/08/13 01:25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	92		70 - 130		10/11/13 23:05	10
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		10/11/13 23:05	10
4-Bromofluorobenzene (Surr)	103		70 - 130		10/11/13 23:05	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 19:43	10
C9-C10 Aromatics	<50.0		50.0	5.00	ug/L			10/08/13 19:43	10
C9-C12 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 19:43	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	94		70 - 130		10/08/13 19:43	10
2,5-Dibromotoluene (pid)	96		70 - 130		10/08/13 19:43	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Acenaphthene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Acenaphthylene (TSP)	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Anthracene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Benzo[a]anthracene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Benzo[a]pyrene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Benzo[b]fluoranthene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Benzo[g,h,i]perylene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Benzo[k]fluoranthene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Chrysene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Dibenz(a,h)anthracene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Fluoranthene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Fluorene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Indeno[1,2,3-cd]pyrene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Naphthalene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Phenanthrene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
Pyrene	<9.52		9.52	1.90	ug/L		10/11/13 11:32	10/12/13 23:24	1
C11-C22 Aromatics (unadjusted)	16.2	J B	47.6	9.52	ug/L		10/11/13 11:32	10/12/13 23:24	1
C19-C36 Aliphatics	<47.6		47.6	9.52	ug/L		10/11/13 11:32	10/12/13 23:24	1
C9-C18 Aliphatics	21.5	J B	47.6	9.52	ug/L		10/11/13 11:32	10/12/13 23:24	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	25	X	40 - 140	10/11/13 11:32	10/12/13 23:24	1
2-Bromonaphthalene	59		40 - 140	10/11/13 11:32	10/12/13 23:24	1
2-Fluorobiphenyl	95		40 - 140	10/11/13 11:32	10/12/13 23:24	1
o-Terphenyl	52		40 - 140	10/11/13 11:32	10/12/13 23:24	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-3R

Lab Sample ID: 480-47378-15

Date Collected: 10/04/13 09:05

Matrix: Water

Date Received: 10/08/13 01:25

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000720	J	0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 20:40	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 20:40	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 20:40	1
Barium	0.146		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 20:40	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 20:40	1
Nickel	0.00721	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 20:40	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 20:40	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 20:40	1
Arsenic	0.00609	J	0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 20:40	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 20:40	1
Zinc	0.112		0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 20:40	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 20:40	1
Chromium	0.00123	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 20:40	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:52	1

Client Sample ID: WCMW-3

Lab Sample ID: 480-47378-16

Date Collected: 10/04/13 10:07

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 23:30	10
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 23:30	10
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 23:30	10
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 23:30	10
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 23:30	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 23:30	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 23:30	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 23:30	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 23:30	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 23:30	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 23:30	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 23:30	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 23:30	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 23:30	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 23:30	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 23:30	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 23:30	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 23:30	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 23:30	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 23:30	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 23:30	10
2-Butanone (MEK)	<100	*	100	13.2	ug/L			10/11/13 23:30	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 23:30	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 23:30	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 23:30	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 23:30	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-3

Lab Sample ID: 480-47378-16

Date Collected: 10/04/13 10:07

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 23:30	10
Acetone	<500		500	30.0	ug/L			10/11/13 23:30	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 23:30	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 23:30	10
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 23:30	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 23:30	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 23:30	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 23:30	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 23:30	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 23:30	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 23:30	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 23:30	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 23:30	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 23:30	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 23:30	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 23:30	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 23:30	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 23:30	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 23:30	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 23:30	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 23:30	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 23:30	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 23:30	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 23:30	10
Methyl tert-butyl ether	3.60 J		10.0	1.60	ug/L			10/11/13 23:30	10
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 23:30	10
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 23:30	10
Naphthalene	<50.0		50.0	4.30	ug/L			10/11/13 23:30	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 23:30	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 23:30	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 23:30	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 23:30	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 23:30	10
Tert-amyl methyl ether	<50.0		50.0	2.70	ug/L			10/11/13 23:30	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 23:30	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 23:30	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 23:30	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 23:30	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 23:30	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 23:30	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 23:30	10
Trichloroethene	<10.0		10.0	4.60	ug/L			10/11/13 23:30	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 23:30	10
Vinyl chloride	11.4		10.0	9.00	ug/L			10/11/13 23:30	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 23:30	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	93		70 - 130		10/11/13 23:30	10
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		10/11/13 23:30	10
4-Bromofluorobenzene (Surr)	103		70 - 130		10/11/13 23:30	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-3

Lab Sample ID: 480-47378-16

Date Collected: 10/04/13 10:07

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 20:22	10
C9-C10 Aromatics	<50.0		50.0	5.00	ug/L			10/08/13 20:22	10
C9-C12 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/08/13 20:22	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	95		70 - 130		10/08/13 20:22	10
2,5-Dibromotoluene (pid)	97		70 - 130		10/08/13 20:22	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Acenaphthene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Acenaphthylene (TSP)	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Anthracene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Benzo[a]anthracene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Benzo[a]pyrene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Benzo[b]fluoranthene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Benzo[g,h,i]perylene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Benzo[k]fluoranthene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Chrysene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Dibenz(a,h)anthracene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Fluoranthene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Fluorene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Indeno[1,2,3-cd]pyrene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Naphthalene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Phenanthrene	2.94	J	9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
Pyrene	<9.75		9.75	1.95	ug/L		10/11/13 11:32	10/12/13 23:53	1
C11-C22 Aromatics (unadjusted)	20.4	J B	48.8	9.75	ug/L		10/11/13 11:32	10/12/13 23:53	1
C19-C36 Aliphatics	15.3	J	48.8	9.75	ug/L		10/11/13 11:32	10/12/13 23:53	1
C9-C18 Aliphatics	10.8	J B	48.8	9.75	ug/L		10/11/13 11:32	10/12/13 23:53	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	34	X	40 - 140	10/11/13 11:32	10/12/13 23:53	1
2-Bromonaphthalene	80		40 - 140	10/11/13 11:32	10/12/13 23:53	1
2-Fluorobiphenyl	93		40 - 140	10/11/13 11:32	10/12/13 23:53	1
o-Terphenyl	63		40 - 140	10/11/13 11:32	10/12/13 23:53	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 20:43	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 20:43	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 20:43	1
Barium	0.0463		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 20:43	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-3

Lab Sample ID: 480-47378-16

Date Collected: 10/04/13 10:07

Matrix: Water

Date Received: 10/08/13 01:25

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 20:43	1
Nickel	0.00160	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 20:43	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 20:43	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 20:43	1
Arsenic	0.00573	J	0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 20:43	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 20:43	1
Zinc	0.00514	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 20:43	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 20:43	1
Chromium	<0.00500		0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 20:43	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:53	1

Client Sample ID: MW-4R

Lab Sample ID: 480-47378-17

Date Collected: 10/04/13 11:17

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<10.0		10.0	3.50	ug/L			10/11/13 23:56	10
1,1,1-Trichloroethane	<10.0		10.0	8.20	ug/L			10/11/13 23:56	10
1,1,2,2-Tetrachloroethane	<5.00		5.00	2.10	ug/L			10/11/13 23:56	10
1,1,2-Trichloroethane	<10.0		10.0	2.30	ug/L			10/11/13 23:56	10
1,1-Dichloroethane	<10.0		10.0	3.80	ug/L			10/11/13 23:56	10
1,1-Dichloroethene	<10.0		10.0	2.90	ug/L			10/11/13 23:56	10
1,1-Dichloropropene	<10.0		10.0	7.20	ug/L			10/11/13 23:56	10
1,2,3-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 23:56	10
1,2,3-Trichloropropane	<10.0		10.0	8.90	ug/L			10/11/13 23:56	10
1,2,4-Trichlorobenzene	<10.0		10.0	4.10	ug/L			10/11/13 23:56	10
1,2,4-Trimethylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 23:56	10
1,2-Dibromo-3-Chloropropane	<50.0		50.0	3.90	ug/L			10/11/13 23:56	10
1,2-Dichlorobenzene	<10.0		10.0	7.90	ug/L			10/11/13 23:56	10
1,2-Dichloroethane	<10.0		10.0	2.10	ug/L			10/11/13 23:56	10
1,2-Dichloropropane	<10.0		10.0	7.20	ug/L			10/11/13 23:56	10
1,3,5-Trimethylbenzene	<10.0		10.0	7.70	ug/L			10/11/13 23:56	10
1,3-Dichlorobenzene	<10.0		10.0	7.80	ug/L			10/11/13 23:56	10
1,3-Dichloropropane	<10.0		10.0	7.50	ug/L			10/11/13 23:56	10
1,4-Dichlorobenzene	<10.0		10.0	8.40	ug/L			10/11/13 23:56	10
1,4-Dioxane	<500		500	93.2	ug/L			10/11/13 23:56	10
2,2-Dichloropropane	<10.0		10.0	4.00	ug/L			10/11/13 23:56	10
2-Butanone (MEK)	<100	*	100	13.2	ug/L			10/11/13 23:56	10
2-Chlorotoluene	<10.0		10.0	8.60	ug/L			10/11/13 23:56	10
2-Hexanone	<100		100	12.4	ug/L			10/11/13 23:56	10
4-Chlorotoluene	<10.0		10.0	8.40	ug/L			10/11/13 23:56	10
4-Isopropyltoluene	<10.0		10.0	3.10	ug/L			10/11/13 23:56	10
4-Methyl-2-pentanone (MIBK)	<100		100	21.0	ug/L			10/11/13 23:56	10
Acetone	<500		500	30.0	ug/L			10/11/13 23:56	10
Benzene	<10.0		10.0	4.10	ug/L			10/11/13 23:56	10
Bromobenzene	<10.0		10.0	8.00	ug/L			10/11/13 23:56	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-4R

Lab Sample ID: 480-47378-17

Date Collected: 10/04/13 11:17

Matrix: Water

Date Received: 10/08/13 01:25

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	<10.0		10.0	2.60	ug/L			10/11/13 23:56	10
Bromomethane	<20.0		20.0	6.90	ug/L			10/11/13 23:56	10
Carbon disulfide	<100		100	1.90	ug/L			10/11/13 23:56	10
Carbon tetrachloride	<10.0		10.0	2.70	ug/L			10/11/13 23:56	10
Chlorobenzene	<10.0		10.0	7.50	ug/L			10/11/13 23:56	10
Chlorobromomethane	<10.0		10.0	8.70	ug/L			10/11/13 23:56	10
Chlorodibromomethane	<5.00		5.00	3.20	ug/L			10/11/13 23:56	10
Chloroethane	<20.0		20.0	3.20	ug/L			10/11/13 23:56	10
Chloroform	<10.0		10.0	3.40	ug/L			10/11/13 23:56	10
Chloromethane	<20.0		20.0	3.50	ug/L			10/11/13 23:56	10
cis-1,2-Dichloroethene	<10.0		10.0	8.10	ug/L			10/11/13 23:56	10
cis-1,3-Dichloropropene	<4.00		4.00	3.60	ug/L			10/11/13 23:56	10
Dichlorobromomethane	<5.00		5.00	3.90	ug/L			10/11/13 23:56	10
Dichlorodifluoromethane	<10.0		10.0	6.80	ug/L			10/11/13 23:56	10
Ethyl ether	<10.0		10.0	7.20	ug/L			10/11/13 23:56	10
Ethylbenzene	<10.0		10.0	7.40	ug/L			10/11/13 23:56	10
Ethylene Dibromide	<10.0		10.0	7.30	ug/L			10/11/13 23:56	10
Hexachlorobutadiene	<4.00		4.00	2.80	ug/L			10/11/13 23:56	10
Isopropyl ether	<100		100	5.90	ug/L			10/11/13 23:56	10
Isopropylbenzene	<10.0		10.0	7.90	ug/L			10/11/13 23:56	10
Methyl tert-butyl ether	35.7		10.0	1.60	ug/L			10/11/13 23:56	10
Methylene Chloride	<10.0		10.0	4.40	ug/L			10/11/13 23:56	10
m-Xylene & p-Xylene	<20.0		20.0	6.60	ug/L			10/11/13 23:56	10
Naphthalene	56.0		50.0	4.30	ug/L			10/11/13 23:56	10
n-Butylbenzene	<10.0		10.0	6.40	ug/L			10/11/13 23:56	10
N-Propylbenzene	<10.0		10.0	6.90	ug/L			10/11/13 23:56	10
o-Xylene	<10.0		10.0	7.60	ug/L			10/11/13 23:56	10
sec-Butylbenzene	<10.0		10.0	7.50	ug/L			10/11/13 23:56	10
Styrene	<10.0		10.0	7.30	ug/L			10/11/13 23:56	10
Tert-amyl methyl ether	7.92 J		50.0	2.70	ug/L			10/11/13 23:56	10
Tert-butyl ethyl ether	<50.0		50.0	2.94	ug/L			10/11/13 23:56	10
tert-Butylbenzene	<10.0		10.0	8.10	ug/L			10/11/13 23:56	10
Tetrachloroethene	<10.0		10.0	3.60	ug/L			10/11/13 23:56	10
Tetrahydrofuran	<100		100	12.5	ug/L			10/11/13 23:56	10
Toluene	<10.0		10.0	5.10	ug/L			10/11/13 23:56	10
trans-1,2-Dichloroethene	<10.0		10.0	9.00	ug/L			10/11/13 23:56	10
trans-1,3-Dichloropropene	<4.00		4.00	3.70	ug/L			10/11/13 23:56	10
Trichloroethene	<10.0		10.0	4.60	ug/L			10/11/13 23:56	10
Trichlorofluoromethane	<10.0		10.0	8.80	ug/L			10/11/13 23:56	10
Vinyl chloride	<10.0		10.0	9.00	ug/L			10/11/13 23:56	10
Dibromomethane	<10.0		10.0	4.10	ug/L			10/11/13 23:56	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	92		70 - 130		10/11/13 23:56	10
1,2-Dichloroethane-d4 (Surr)	94		70 - 130		10/11/13 23:56	10
4-Bromofluorobenzene (Surr)	104		70 - 130		10/11/13 23:56	10

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-4R

Lab Sample ID: 480-47378-17

Date Collected: 10/04/13 11:17

Matrix: Water

Date Received: 10/08/13 01:25

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C9-C12 Aliphatics (adjusted)	<50.0		50.0	15.0	ug/L			10/09/13 16:39	10

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<50.0		50.0	15.0	ug/L			10/09/13 12:11	10
C9-C10 Aromatics	99.0		50.0	5.00	ug/L			10/09/13 12:11	10
C9-C12 Aliphatics (unadjusted)	65.9		50.0	15.0	ug/L			10/09/13 12:11	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	110		70 - 130		10/09/13 12:11	10
2,5-Dibromotoluene (pid)	106		70 - 130		10/09/13 12:11	10

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	27.1		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Acenaphthene	98.3		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Acenaphthylene (TSP)	<9.55		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Anthracene	<9.55		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Benzo[a]anthracene	<9.55		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Benzo[a]pyrene	<9.55		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Benzo[b]fluoranthene	<9.55		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Benzo[g,h,i]perylene	<9.55		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Benzo[k]fluoranthene	<9.55		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Chrysene	<9.55		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Dibenz(a,h)anthracene	<9.55		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Fluoranthene	3.88	J	9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Fluorene	43.4		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Indeno[1,2,3-cd]pyrene	<9.55		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Naphthalene	26.4		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Phenanthrene	47.1		9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
Pyrene	2.05	J	9.55	1.91	ug/L		10/11/13 11:32	10/14/13 14:01	1
C11-C22 Aromatics (unadjusted)	561	B	47.7	9.55	ug/L		10/11/13 11:32	10/14/13 14:01	1
C19-C36 Aliphatics	<47.7		47.7	9.55	ug/L		10/11/13 11:32	10/14/13 14:01	1
C9-C18 Aliphatics	84.5	B	47.7	9.55	ug/L		10/11/13 11:32	10/14/13 14:01	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	313		50.0	50.0	ug/L			10/14/13 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	25	X	40 - 140	10/11/13 11:32	10/14/13 14:01	1
2-Bromonaphthalene	80		40 - 140	10/11/13 11:32	10/14/13 14:01	1
2-Fluorobiphenyl	42		40 - 140	10/11/13 11:32	10/14/13 14:01	1
o-Terphenyl	49		40 - 140	10/11/13 11:32	10/14/13 14:01	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/09/13 20:53	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/09/13 20:53	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/09/13 20:53	1
Barium	0.396		0.0100	0.000700	mg/L		10/08/13 08:10	10/09/13 20:53	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/09/13 20:53	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-4R

Lab Sample ID: 480-47378-17

Date Collected: 10/04/13 11:17

Matrix: Water

Date Received: 10/08/13 01:25

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00230	J	0.0100	0.00126	mg/L		10/08/13 08:10	10/09/13 20:53	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/09/13 20:53	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/09/13 20:53	1
Arsenic	<0.0100		0.0100	0.00555	mg/L		10/08/13 08:10	10/09/13 20:53	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/09/13 20:53	1
Zinc	0.00256	J	0.0500	0.00150	mg/L		10/08/13 08:10	10/09/13 20:53	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/09/13 20:53	1
Chromium	0.00130	J	0.00500	0.00100	mg/L		10/08/13 08:10	10/09/13 20:53	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 14:00	1

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (70-130)	12DCE (70-130)	BFB (70-130)
480-47378-1	WCMW-6	95	94	105
480-47378-2	WCMW-10	92	94	104
480-47378-3	WCMW-5	93	94	103
480-47378-4	WCMW-9	94	94	106
480-47378-5	WCMW-2	91	95	104
480-47378-6	WCMW-7	91	95	102
480-47378-8	MW-2R	91	92	103
480-47378-9	WCMW-8	92	95	101
480-47378-10	WCMW-11	91	95	102
480-47378-11	WCMW-4	90	93	100
480-47378-12	WCMW-1	92	93	101
480-47378-13	MW-1R	89	93	100
480-47378-14	TB-10032013	94	96	104
480-47378-15	MW-3R	92	98	103
480-47378-16	WCMW-3	93	98	103
480-47378-17	MW-4R	92	94	104
LCS 480-144314/5	Lab Control Sample	92	97	105
LCSD 480-144314/6	Lab Control Sample Dup	92	97	105
MB 480-144314/8	Method Blank	92	93	102

Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		25DBT2 (70-130)	25DBT1 (70-130)
480-47378-1	WCMW-6	95	98
480-47378-2	WCMW-10	96	97
480-47378-3	WCMW-5	94	97
480-47378-4	WCMW-9	95	98
480-47378-5	WCMW-2	95	96
480-47378-6	WCMW-7	98	99
480-47378-8	MW-2R	96	97
480-47378-9	WCMW-8	94	96
480-47378-10	WCMW-11	94	97
480-47378-11	WCMW-4	94	97
480-47378-12	WCMW-1	91	94
480-47378-13	MW-1R	91	96
480-47378-15	MW-3R	94	96
480-47378-16	WCMW-3	95	97
480-47378-17	MW-4R	110	106
LCS 480-143366/4	Lab Control Sample	100	103
LCS 480-143687/4	Lab Control Sample	100	104
LCSD 480-143366/5	Lab Control Sample Dup	97	100

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		25DBT2 (70-130)	25DBT1 (70-130)
LCSD 480-143687/5	Lab Control Sample Dup	97	99
MB 480-143366/3	Method Blank	99	101
MB 480-143687/3	Method Blank	98	102

Surrogate Legend

25DBT = 2,5-Dibromotoluene (fid)

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		1COD2 (40-140)	2BN1 (40-140)	FBP1 (40-140)	OTPH1 (40-140)
480-47378-1	WCMW-6	45	84	98	71
480-47378-2	WCMW-10	41	89	101	66
480-47378-3	WCMW-5	48	85	101	83
480-47378-4	WCMW-9	35 X	83	101	51
480-47378-5	WCMW-2	29 X	87	103	54
480-47378-6	WCMW-7	46	83	98	74
480-47378-7	WCMW-907	44	83	96	71
480-47378-8	MW-2R	48	86	104	74
480-47378-9	WCMW-8	44	82	96	68
480-47378-10	WCMW-11	46	87	99	67
480-47378-11	WCMW-4	37 X	89	105	74
480-47378-12	WCMW-1	34 X	86	104	73
480-47378-13	MW-1R	34 X	93	105	75
480-47378-15	MW-3R	25 X	59	95	52
480-47378-16	WCMW-3	34 X	80	93	63
480-47378-17	MW-4R	25 X	80	42	49
LCS 480-144324/2-B	Lab Control Sample	79	84	96	85
LCSD 480-144324/3-B	Lab Control Sample Dup	84	91	104	91
MB 480-144324/1-B	Method Blank	89	73	101	90

Surrogate Legend

1COD = 1-Chlorooctadecane
2BN = 2-Bromonaphthalene
FBP = 2-Fluorobiphenyl
OTPH = o-Terphenyl

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-144314/8

Matrix: Water

Analysis Batch: 144314

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.00		1.00	0.350	ug/L			10/11/13 15:36	1
1,1,1-Trichloroethane	<1.00		1.00	0.820	ug/L			10/11/13 15:36	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.210	ug/L			10/11/13 15:36	1
1,1,2-Trichloroethane	<1.00		1.00	0.230	ug/L			10/11/13 15:36	1
1,1-Dichloroethane	<1.00		1.00	0.380	ug/L			10/11/13 15:36	1
1,1-Dichloroethene	<1.00		1.00	0.290	ug/L			10/11/13 15:36	1
1,1-Dichloropropene	<1.00		1.00	0.720	ug/L			10/11/13 15:36	1
1,2,3-Trichlorobenzene	<1.00		1.00	0.410	ug/L			10/11/13 15:36	1
1,2,3-Trichloropropane	<1.00		1.00	0.890	ug/L			10/11/13 15:36	1
1,2,4-Trichlorobenzene	<1.00		1.00	0.410	ug/L			10/11/13 15:36	1
1,2,4-Trimethylbenzene	<1.00		1.00	0.750	ug/L			10/11/13 15:36	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.390	ug/L			10/11/13 15:36	1
1,2-Dichlorobenzene	<1.00		1.00	0.790	ug/L			10/11/13 15:36	1
1,2-Dichloroethane	<1.00		1.00	0.210	ug/L			10/11/13 15:36	1
1,2-Dichloropropane	<1.00		1.00	0.720	ug/L			10/11/13 15:36	1
1,3,5-Trimethylbenzene	<1.00		1.00	0.770	ug/L			10/11/13 15:36	1
1,3-Dichlorobenzene	<1.00		1.00	0.780	ug/L			10/11/13 15:36	1
1,3-Dichloropropane	<1.00		1.00	0.750	ug/L			10/11/13 15:36	1
1,4-Dichlorobenzene	<1.00		1.00	0.840	ug/L			10/11/13 15:36	1
1,4-Dioxane	<50.0		50.0	9.32	ug/L			10/11/13 15:36	1
2,2-Dichloropropane	<1.00		1.00	0.400	ug/L			10/11/13 15:36	1
2-Butanone (MEK)	<10.0		10.0	1.32	ug/L			10/11/13 15:36	1
2-Chlorotoluene	<1.00		1.00	0.860	ug/L			10/11/13 15:36	1
2-Hexanone	<10.0		10.0	1.24	ug/L			10/11/13 15:36	1
4-Chlorotoluene	<1.00		1.00	0.840	ug/L			10/11/13 15:36	1
4-Isopropyltoluene	<1.00		1.00	0.310	ug/L			10/11/13 15:36	1
4-Methyl-2-pentanone (MIBK)	<10.0		10.0	2.10	ug/L			10/11/13 15:36	1
Acetone	<50.0		50.0	3.00	ug/L			10/11/13 15:36	1
Benzene	<1.00		1.00	0.410	ug/L			10/11/13 15:36	1
Bromobenzene	<1.00		1.00	0.800	ug/L			10/11/13 15:36	1
Bromoform	<1.00		1.00	0.260	ug/L			10/11/13 15:36	1
Bromomethane	<2.00		2.00	0.690	ug/L			10/11/13 15:36	1
Carbon disulfide	<10.0		10.0	0.190	ug/L			10/11/13 15:36	1
Carbon tetrachloride	<1.00		1.00	0.270	ug/L			10/11/13 15:36	1
Chlorobenzene	<1.00		1.00	0.750	ug/L			10/11/13 15:36	1
Chlorobromomethane	<1.00		1.00	0.870	ug/L			10/11/13 15:36	1
Chlorodibromomethane	<0.500		0.500	0.320	ug/L			10/11/13 15:36	1
Chloroethane	<2.00		2.00	0.320	ug/L			10/11/13 15:36	1
Chloroform	<1.00		1.00	0.340	ug/L			10/11/13 15:36	1
Chloromethane	<2.00		2.00	0.350	ug/L			10/11/13 15:36	1
cis-1,2-Dichloroethene	<1.00		1.00	0.810	ug/L			10/11/13 15:36	1
cis-1,3-Dichloropropene	<0.400		0.400	0.360	ug/L			10/11/13 15:36	1
Dichlorobromomethane	<0.500		0.500	0.390	ug/L			10/11/13 15:36	1
Dichlorodifluoromethane	<1.00		1.00	0.680	ug/L			10/11/13 15:36	1
Ethyl ether	<1.00		1.00	0.720	ug/L			10/11/13 15:36	1
Ethylbenzene	<1.00		1.00	0.740	ug/L			10/11/13 15:36	1
Ethylene Dibromide	<1.00		1.00	0.730	ug/L			10/11/13 15:36	1
Hexachlorobutadiene	<0.400		0.400	0.280	ug/L			10/11/13 15:36	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-144314/8

Matrix: Water

Analysis Batch: 144314

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<10.0		10.0	0.590	ug/L			10/11/13 15:36	1
Isopropylbenzene	<1.00		1.00	0.790	ug/L			10/11/13 15:36	1
Methyl tert-butyl ether	<1.00		1.00	0.160	ug/L			10/11/13 15:36	1
Methylene Chloride	<1.00		1.00	0.440	ug/L			10/11/13 15:36	1
m-Xylene & p-Xylene	<2.00		2.00	0.660	ug/L			10/11/13 15:36	1
Naphthalene	<5.00		5.00	0.430	ug/L			10/11/13 15:36	1
n-Butylbenzene	<1.00		1.00	0.640	ug/L			10/11/13 15:36	1
N-Propylbenzene	<1.00		1.00	0.690	ug/L			10/11/13 15:36	1
o-Xylene	<1.00		1.00	0.760	ug/L			10/11/13 15:36	1
sec-Butylbenzene	<1.00		1.00	0.750	ug/L			10/11/13 15:36	1
Styrene	<1.00		1.00	0.730	ug/L			10/11/13 15:36	1
Tert-amyl methyl ether	<5.00		5.00	0.270	ug/L			10/11/13 15:36	1
Tert-butyl ethyl ether	<5.00		5.00	0.294	ug/L			10/11/13 15:36	1
tert-Butylbenzene	<1.00		1.00	0.810	ug/L			10/11/13 15:36	1
Tetrachloroethene	<1.00		1.00	0.360	ug/L			10/11/13 15:36	1
Tetrahydrofuran	<10.0		10.0	1.25	ug/L			10/11/13 15:36	1
Toluene	<1.00		1.00	0.510	ug/L			10/11/13 15:36	1
trans-1,2-Dichloroethene	<1.00		1.00	0.900	ug/L			10/11/13 15:36	1
trans-1,3-Dichloropropene	<0.400		0.400	0.370	ug/L			10/11/13 15:36	1
Trichloroethene	<1.00		1.00	0.460	ug/L			10/11/13 15:36	1
Trichlorofluoromethane	<1.00		1.00	0.880	ug/L			10/11/13 15:36	1
Vinyl chloride	<1.00		1.00	0.900	ug/L			10/11/13 15:36	1
Dibromomethane	<1.00		1.00	0.410	ug/L			10/11/13 15:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	92		70 - 130		10/11/13 15:36	1
1,2-Dichloroethane-d4 (Surr)	93		70 - 130		10/11/13 15:36	1
4-Bromofluorobenzene (Surr)	102		70 - 130		10/11/13 15:36	1

Lab Sample ID: LCS 480-144314/5

Matrix: Water

Analysis Batch: 144314

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	23.72		ug/L		95	70 - 130
1,1,1-Trichloroethane	25.0	26.28		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	25.0	24.05		ug/L		96	70 - 130
1,1,2-Trichloroethane	25.0	23.76		ug/L		95	70 - 130
1,1-Dichloroethane	25.0	25.99		ug/L		104	70 - 130
1,1-Dichloroethene	25.0	26.93		ug/L		108	70 - 130
1,1-Dichloropropene	25.0	25.92		ug/L		104	70 - 130
1,2,3-Trichlorobenzene	25.0	23.38		ug/L		94	70 - 130
1,2,3-Trichloropropane	25.0	24.03		ug/L		96	70 - 130
1,2,4-Trichlorobenzene	25.0	23.64		ug/L		95	70 - 130
1,2,4-Trimethylbenzene	25.0	23.76		ug/L		95	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	22.33		ug/L		89	70 - 130
1,2-Dichlorobenzene	25.0	23.34		ug/L		93	70 - 130
1,2-Dichloroethane	25.0	24.33		ug/L		97	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-144314/5

Matrix: Water

Analysis Batch: 144314

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	25.73		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	25.0	23.50		ug/L		94	70 - 130
1,3-Dichlorobenzene	25.0	23.62		ug/L		94	70 - 130
1,3-Dichloropropane	25.0	24.12		ug/L		96	70 - 130
1,4-Dichlorobenzene	25.0	23.32		ug/L		93	70 - 130
1,4-Dioxane	1000	1240		ug/L		124	70 - 130
2,2-Dichloropropane	25.0	26.80		ug/L		107	70 - 130
2-Butanone (MEK)	125	178.0	*	ug/L		142	70 - 130
2-Chlorotoluene	25.0	29.73		ug/L		119	70 - 130
2-Hexanone	125	121.3		ug/L		97	70 - 130
4-Chlorotoluene	25.0	26.94		ug/L		108	70 - 130
4-Isopropyltoluene	25.0	23.55		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	125	115.4		ug/L		92	70 - 130
Acetone	125	131.4		ug/L		105	70 - 130
Benzene	25.0	25.35		ug/L		101	70 - 130
Bromobenzene	25.0	24.13		ug/L		97	70 - 130
Bromoform	25.0	26.89		ug/L		108	70 - 130
Bromomethane	25.0	25.13		ug/L		101	70 - 130
Carbon disulfide	25.0	23.75		ug/L		95	70 - 130
Carbon tetrachloride	25.0	27.20		ug/L		109	70 - 130
Chlorobenzene	25.0	24.42		ug/L		98	70 - 130
Chlorobromomethane	25.0	26.69		ug/L		107	70 - 130
Chlorodibromomethane	25.0	26.01		ug/L		104	70 - 130
Chloroethane	25.0	26.00		ug/L		104	70 - 130
Chloroform	25.0	25.41		ug/L		102	70 - 130
Chloromethane	25.0	23.21		ug/L		93	70 - 130
cis-1,2-Dichloroethene	25.0	24.82		ug/L		99	70 - 130
cis-1,3-Dichloropropene	25.0	28.30		ug/L		113	70 - 130
Dichlorobromomethane	25.0	25.98		ug/L		104	70 - 130
Dichlorodifluoromethane	50.0	49.26		ug/L		99	70 - 130
Ethyl ether	25.0	25.84		ug/L		103	70 - 130
Ethylbenzene	25.0	23.88		ug/L		96	70 - 130
Ethylene Dibromide	25.0	24.62		ug/L		98	70 - 130
Hexachlorobutadiene	25.0	24.11		ug/L		96	70 - 130
Isopropyl ether	25.0	25.67		ug/L		103	70 - 130
Isopropylbenzene	25.0	23.41		ug/L		94	70 - 130
Methyl tert-butyl ether	25.0	26.08		ug/L		104	70 - 130
Methylene Chloride	25.0	25.72		ug/L		103	70 - 130
m-Xylene & p-Xylene	50.0	48.96		ug/L		98	70 - 130
Naphthalene	25.0	23.19		ug/L		93	70 - 130
n-Butylbenzene	25.0	23.56		ug/L		94	70 - 130
N-Propylbenzene	25.0	24.16		ug/L		97	70 - 130
o-Xylene	25.0	24.04		ug/L		96	70 - 130
sec-Butylbenzene	25.0	23.61		ug/L		94	70 - 130
Styrene	25.0	24.36		ug/L		97	70 - 130
Tert-amyl methyl ether	25.0	29.11		ug/L		116	70 - 130
Tert-butyl ethyl ether	25.0	27.59		ug/L		110	70 - 130
tert-Butylbenzene	25.0	22.72		ug/L		91	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-144314/5

Matrix: Water

Analysis Batch: 144314

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	25.56		ug/L		102	70 - 130
Tetrahydrofuran	125	122.4		ug/L		98	70 - 130
Toluene	25.0	23.65		ug/L		95	70 - 130
trans-1,2-Dichloroethene	25.0	25.79		ug/L		103	70 - 130
trans-1,3-Dichloropropene	25.0	25.76		ug/L		103	70 - 130
Trichloroethene	25.0	25.49		ug/L		102	70 - 130
Trichlorofluoromethane	25.0	27.42		ug/L		110	70 - 130
Vinyl chloride	25.0	26.06		ug/L		104	70 - 130
Dibromomethane	25.0	25.75		ug/L		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	92		70 - 130
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 480-144314/6

Matrix: Water

Analysis Batch: 144314

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	24.08		ug/L		96	70 - 130	1	20
1,1,1-Trichloroethane	25.0	25.08		ug/L		100	70 - 130	5	20
1,1,2,2-Tetrachloroethane	25.0	22.89		ug/L		92	70 - 130	5	20
1,1,2-Trichloroethane	25.0	23.02		ug/L		92	70 - 130	3	20
1,1-Dichloroethane	25.0	24.73		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	25.0	24.77		ug/L		99	70 - 130	8	20
1,1-Dichloropropene	25.0	25.19		ug/L		101	70 - 130	3	20
1,2,3-Trichlorobenzene	25.0	23.50		ug/L		94	70 - 130	1	20
1,2,3-Trichloropropane	25.0	22.94		ug/L		92	70 - 130	5	20
1,2,4-Trichlorobenzene	25.0	23.43		ug/L		94	70 - 130	1	20
1,2,4-Trimethylbenzene	25.0	22.77		ug/L		91	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	25.0	21.72		ug/L		87	70 - 130	3	20
1,2-Dichlorobenzene	25.0	22.92		ug/L		92	70 - 130	2	20
1,2-Dichloroethane	25.0	23.75		ug/L		95	70 - 130	2	20
1,2-Dichloropropane	25.0	24.59		ug/L		98	70 - 130	5	20
1,3,5-Trimethylbenzene	25.0	22.53		ug/L		90	70 - 130	4	20
1,3-Dichlorobenzene	25.0	22.79		ug/L		91	70 - 130	4	20
1,3-Dichloropropane	25.0	23.57		ug/L		94	70 - 130	2	20
1,4-Dichlorobenzene	25.0	22.76		ug/L		91	70 - 130	2	20
1,4-Dioxane	1000	1199		ug/L		120	70 - 130	3	20
2,2-Dichloropropane	25.0	25.18		ug/L		101	70 - 130	6	20
2-Butanone (MEK)	125	174.0	*	ug/L		139	70 - 130	2	20
2-Chlorotoluene	25.0	27.99		ug/L		112	70 - 130	6	20
2-Hexanone	125	119.0		ug/L		95	70 - 130	2	20
4-Chlorotoluene	25.0	25.80		ug/L		103	70 - 130	4	20
4-Isopropyltoluene	25.0	22.76		ug/L		91	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	125	115.5		ug/L		92	70 - 130	0	20
Acetone	125	126.0		ug/L		101	70 - 130	4	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-144314/6

Matrix: Water

Analysis Batch: 144314

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	25.0	24.49		ug/L		98	70 - 130	3	20
Bromobenzene	25.0	23.21		ug/L		93	70 - 130	4	20
Bromoform	25.0	26.16		ug/L		105	70 - 130	3	20
Bromomethane	25.0	23.92		ug/L		96	70 - 130	5	20
Carbon disulfide	25.0	22.61		ug/L		90	70 - 130	5	20
Carbon tetrachloride	25.0	25.30		ug/L		101	70 - 130	7	20
Chlorobenzene	25.0	23.61		ug/L		94	70 - 130	3	20
Chlorobromomethane	25.0	25.93		ug/L		104	70 - 130	3	20
Chlorodibromomethane	25.0	25.25		ug/L		101	70 - 130	3	20
Chloroethane	25.0	24.35		ug/L		97	70 - 130	7	20
Chloroform	25.0	24.28		ug/L		97	70 - 130	5	20
Chloromethane	25.0	21.82		ug/L		87	70 - 130	6	20
cis-1,2-Dichloroethene	25.0	24.11		ug/L		96	70 - 130	3	20
cis-1,3-Dichloropropene	25.0	26.69		ug/L		107	70 - 130	6	20
Dichlorobromomethane	25.0	25.46		ug/L		102	70 - 130	2	20
Dichlorodifluoromethane	50.0	45.78		ug/L		92	70 - 130	7	20
Ethyl ether	25.0	24.79		ug/L		99	70 - 130	4	20
Ethylbenzene	25.0	23.09		ug/L		92	70 - 130	3	20
Ethylene Dibromide	25.0	23.72		ug/L		95	70 - 130	4	20
Hexachlorobutadiene	25.0	23.18		ug/L		93	70 - 130	4	20
Isopropyl ether	25.0	24.95		ug/L		100	70 - 130	3	20
Isopropylbenzene	25.0	22.39		ug/L		90	70 - 130	4	20
Methyl tert-butyl ether	25.0	25.49		ug/L		102	70 - 130	2	20
Methylene Chloride	25.0	24.42		ug/L		98	70 - 130	5	20
m-Xylene & p-Xylene	50.0	46.76		ug/L		94	70 - 130	5	20
Naphthalene	25.0	23.41		ug/L		94	70 - 130	1	20
n-Butylbenzene	25.0	22.40		ug/L		90	70 - 130	5	20
N-Propylbenzene	25.0	22.80		ug/L		91	70 - 130	6	20
o-Xylene	25.0	23.96		ug/L		96	70 - 130	0	20
sec-Butylbenzene	25.0	22.38		ug/L		90	70 - 130	5	20
Styrene	25.0	23.74		ug/L		95	70 - 130	3	20
Tert-amyl methyl ether	25.0	28.34		ug/L		113	70 - 130	3	20
Tert-butyl ethyl ether	25.0	26.87		ug/L		107	70 - 130	3	20
tert-Butylbenzene	25.0	21.89		ug/L		88	70 - 130	4	20
Tetrachloroethene	25.0	24.95		ug/L		100	70 - 130	2	20
Tetrahydrofuran	125	115.3		ug/L		92	70 - 130	6	20
Toluene	25.0	22.78		ug/L		91	70 - 130	4	20
trans-1,2-Dichloroethene	25.0	24.32		ug/L		97	70 - 130	6	20
trans-1,3-Dichloropropene	25.0	25.17		ug/L		101	70 - 130	2	20
Trichloroethene	25.0	25.33		ug/L		101	70 - 130	1	20
Trichlorofluoromethane	25.0	25.51		ug/L		102	70 - 130	7	20
Vinyl chloride	25.0	24.50		ug/L		98	70 - 130	6	20
Dibromomethane	25.0	24.54		ug/L		98	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	92		70 - 130
1,2-Dichloroethane-d4 (Surr)	97		70 - 130
4-Bromofluorobenzene (Surr)	105		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 480-143366/3

Matrix: Water

Analysis Batch: 143366

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			10/08/13 08:53	1
C9-C10 Aromatics	<5.00		5.00	0.500	ug/L			10/08/13 08:53	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			10/08/13 08:53	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	99		70 - 130					10/08/13 08:53	1
2,5-Dibromotoluene (pid)	101		70 - 130					10/08/13 08:53	1

Lab Sample ID: LCS 480-143366/4

Matrix: Water

Analysis Batch: 143366

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C5-C8 Aliphatics (unadjusted)	15.0	14.83		ug/L		99	70 - 130
C9-C10 Aromatics	5.00	5.135		ug/L		103	70 - 130
C9-C12 Aliphatics (unadjusted)	15.0	15.13		ug/L		101	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
2,5-Dibromotoluene (fid)	100		70 - 130				
2,5-Dibromotoluene (pid)	103		70 - 130				

Lab Sample ID: LCSD 480-143366/5

Matrix: Water

Analysis Batch: 143366

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C5-C8 Aliphatics (unadjusted)	15.0	14.39		ug/L		96	70 - 130	3	25
C9-C10 Aromatics	5.00	5.039		ug/L		101	70 - 130	2	25
C9-C12 Aliphatics (unadjusted)	15.0	15.00		ug/L		100	70 - 130	1	25
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
2,5-Dibromotoluene (fid)	97		70 - 130						
2,5-Dibromotoluene (pid)	100		70 - 130						

Lab Sample ID: MB 480-143687/3

Matrix: Water

Analysis Batch: 143687

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			10/09/13 09:51	1
C9-C10 Aromatics	<5.00		5.00	0.500	ug/L			10/09/13 09:51	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			10/09/13 09:51	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	98		70 - 130					10/09/13 09:51	1
2,5-Dibromotoluene (pid)	102		70 - 130					10/09/13 09:51	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCS 480-143687/4

Matrix: Water

Analysis Batch: 143687

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C5-C8 Aliphatics (unadjusted)	15.0	14.99		ug/L		100	70 - 130
C9-C10 Aromatics	5.00	5.156		ug/L		103	70 - 130
C9-C12 Aliphatics (unadjusted)	15.0	15.17		ug/L		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,5-Dibromotoluene (fid)	100		70 - 130
2,5-Dibromotoluene (pid)	104		70 - 130

Lab Sample ID: LCSD 480-143687/5

Matrix: Water

Analysis Batch: 143687

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C5-C8 Aliphatics (unadjusted)	15.0	14.73		ug/L		98	70 - 130	2	25
C9-C10 Aromatics	5.00	5.006		ug/L		100	70 - 130	3	25
C9-C12 Aliphatics (unadjusted)	15.0	14.94		ug/L		100	70 - 130	2	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,5-Dibromotoluene (fid)	97		70 - 130
2,5-Dibromotoluene (pid)	99		70 - 130

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 480-144324/1-B

Matrix: Water

Analysis Batch: 144342

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 144324

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Acenaphthene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Acenaphthylene (TSP)	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Anthracene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Benzo[a]anthracene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Benzo[a]pyrene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Benzo[b]fluoranthene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Benzo[g,h,i]perylene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Benzo[k]fluoranthene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Chrysene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Dibenz(a,h)anthracene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Fluoranthene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Fluorene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Indeno[1,2,3-cd]pyrene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Naphthalene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Phenanthrene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
Pyrene	<10.0		10.0	2.00	ug/L		10/11/13 11:32	10/12/13 15:01	1
C11-C22 Aromatics (unadjusted)	25.68	J	50.0	10.0	ug/L		10/11/13 11:32	10/12/13 15:01	1
C19-C36 Aliphatics	<50.0		50.0	10.0	ug/L		10/11/13 11:32	10/12/13 15:01	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: MB 480-144324/1-B

Matrix: Water

Analysis Batch: 144342

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 144324

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C9-C18 Aliphatics	20.20	J	50.0	10.0	ug/L		10/11/13 11:32	10/12/13 15:01	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	89		40 - 140				10/11/13 11:32	10/12/13 15:01	1
2-Bromonaphthalene	73		40 - 140				10/11/13 11:32	10/12/13 15:01	1
2-Fluorobiphenyl	101		40 - 140				10/11/13 11:32	10/12/13 15:01	1
o-Terphenyl	90		40 - 140				10/11/13 11:32	10/12/13 15:01	1

Lab Sample ID: LCS 480-144324/2-B

Matrix: Water

Analysis Batch: 144342

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 144324

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	50.0	37.97		ug/L		76	40 - 140
Acenaphthene	50.0	41.58		ug/L		83	40 - 140
Acenaphthylene (TSP)	50.0	43.29		ug/L		87	40 - 140
Anthracene	50.0	48.72		ug/L		97	40 - 140
Benzo[a]anthracene	50.0	47.46		ug/L		95	40 - 140
Benzo[a]pyrene	50.0	46.89		ug/L		94	40 - 140
Benzo[b]fluoranthene	50.0	46.99		ug/L		94	40 - 140
Benzo[g,h,i]perylene	50.0	48.41		ug/L		97	40 - 140
Benzo[k]fluoranthene	50.0	46.87		ug/L		94	40 - 140
Chrysene	50.0	47.88		ug/L		96	40 - 140
Dibenz(a,h)anthracene	50.0	47.72		ug/L		95	40 - 140
Fluoranthene	50.0	47.14		ug/L		94	40 - 140
Fluorene	50.0	46.20		ug/L		92	40 - 140
Indeno[1,2,3-cd]pyrene	50.0	48.13		ug/L		96	40 - 140
Naphthalene	50.0	34.99		ug/L		70	40 - 140
Phenanthrene	50.0	48.84		ug/L		98	40 - 140
Pyrene	50.0	48.46		ug/L		97	40 - 140
C11-C22 Aromatics (unadjusted)	850	783.6		ug/L		92	40 - 140
C19-C36 Aliphatics	400	400.4		ug/L		100	40 - 140
C9-C18 Aliphatics	300	270.9		ug/L		90	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	79		40 - 140
2-Bromonaphthalene	84		40 - 140
2-Fluorobiphenyl	96		40 - 140
o-Terphenyl	85		40 - 140

Lab Sample ID: LCSD 480-144324/3-B

Matrix: Water

Analysis Batch: 144342

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 144324

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	50.0	41.83		ug/L		84	40 - 140	10	25
Acenaphthene	50.0	45.92		ug/L		92	40 - 140	10	25
Acenaphthylene (TSP)	50.0	46.97		ug/L		94	40 - 140	8	25

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCSD 480-144324/3-B

Matrix: Water

Analysis Batch: 144342

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 144324

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Anthracene	50.0	52.99		ug/L		106	40 - 140	8	25
Benzo[a]anthracene	50.0	51.64		ug/L		103	40 - 140	8	25
Benzo[a]pyrene	50.0	51.10		ug/L		102	40 - 140	9	25
Benzo[b]fluoranthene	50.0	50.48		ug/L		101	40 - 140	7	25
Benzo[g,h,i]perylene	50.0	52.86		ug/L		106	40 - 140	9	25
Benzo[k]fluoranthene	50.0	51.64		ug/L		103	40 - 140	10	25
Chrysene	50.0	52.08		ug/L		104	40 - 140	8	25
Dibenz(a,h)anthracene	50.0	52.75		ug/L		106	40 - 140	10	25
Fluoranthene	50.0	51.89		ug/L		104	40 - 140	10	25
Fluorene	50.0	50.34		ug/L		101	40 - 140	9	25
Indeno[1,2,3-cd]pyrene	50.0	52.05		ug/L		104	40 - 140	8	25
Naphthalene	50.0	38.65		ug/L		77	40 - 140	10	25
Phenanthrene	50.0	53.16		ug/L		106	40 - 140	8	25
Pyrene	50.0	52.80		ug/L		106	40 - 140	9	25
C11-C22 Aromatics (unadjusted)	850	855.8		ug/L		101	40 - 140	9	25
C19-C36 Aliphatics	400	401.3		ug/L		100	40 - 140	0	25
C9-C18 Aliphatics	300	269.1		ug/L		90	40 - 140	1	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctadecane	84		40 - 140
2-Bromonaphthalene	91		40 - 140
2-Fluorobiphenyl	104		40 - 140
o-Terphenyl	91		40 - 140

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-143019/17-B

Matrix: Water

Analysis Batch: 144286

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 143362

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.00100		0.00100	0.000500	mg/L		10/08/13 08:10	10/10/13 20:05	1
Antimony	<0.00600		0.00600	0.00679	mg/L		10/08/13 08:10	10/10/13 20:05	1
Beryllium	<0.00100		0.00100	0.000300	mg/L		10/08/13 08:10	10/10/13 20:05	1
Barium	<0.0100		0.0100	0.000700	mg/L		10/08/13 08:10	10/10/13 20:05	1
Thallium	<0.0100		0.0100	0.0102	mg/L		10/08/13 08:10	10/10/13 20:05	1
Nickel	<0.0100		0.0100	0.00126	mg/L		10/08/13 08:10	10/10/13 20:05	1
Vanadium	<0.0100		0.0100	0.00150	mg/L		10/08/13 08:10	10/10/13 20:05	1
Silver	<0.00500		0.00500	0.00170	mg/L		10/08/13 08:10	10/10/13 20:05	1
Arsenic	<0.0100		0.0100	0.00555	mg/L		10/08/13 08:10	10/10/13 20:05	1
Lead	<0.00500		0.00500	0.00300	mg/L		10/08/13 08:10	10/10/13 20:05	1
Zinc	<0.0500		0.0500	0.00150	mg/L		10/08/13 08:10	10/10/13 20:05	1
Selenium	<0.0100		0.0100	0.00870	mg/L		10/08/13 08:10	10/10/13 20:05	1
Chromium	<0.00500		0.00500	0.00100	mg/L		10/08/13 08:10	10/10/13 20:05	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-143019/18-B

Matrix: Water

Analysis Batch: 144286

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 143362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	
Cadmium	0.200	0.2054		mg/L		103	80 - 120	
Antimony	0.200	0.2046		mg/L		102	80 - 120	
Beryllium	0.200	0.2132		mg/L		107	80 - 120	
Barium	0.200	0.2000		mg/L		100	80 - 120	
Thallium	0.200	0.2036		mg/L		102	80 - 120	
Nickel	0.200	0.2024		mg/L		101	80 - 120	
Vanadium	0.200	0.2018		mg/L		101	80 - 120	
Silver	0.0500	0.05000		mg/L		100	80 - 120	
Arsenic	0.200	0.2071		mg/L		104	80 - 120	
Lead	0.200	0.2006		mg/L		100	80 - 120	
Zinc	0.200	0.2046		mg/L		102	80 - 120	
Selenium	0.200	0.2043		mg/L		102	80 - 120	
Chromium	0.200	0.2054		mg/L		103	80 - 120	

Lab Sample ID: LCSD 480-143019/31-B

Matrix: Water

Analysis Batch: 144286

Client Sample ID: Lab Control Sample Dup

Prep Type: Dissolved

Prep Batch: 143362

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits			
Cadmium	0.200	0.2086		mg/L		104	80 - 120		0	20
Antimony	0.200	0.2080		mg/L		104	80 - 120		1	20
Beryllium	0.200	0.2141		mg/L		107	80 - 120		5	20
Barium	0.200	0.2112		mg/L		106	80 - 120		5	20
Thallium	0.200	0.2052		mg/L		103	80 - 120		1	20
Nickel	0.200	0.2056		mg/L		103	80 - 120		1	20
Vanadium	0.200	0.2083		mg/L		104	80 - 120		3	20
Silver	0.0500	0.05140		mg/L		103	80 - 120		4	20
Arsenic	0.200	0.2125		mg/L		106	80 - 120		2	20
Lead	0.200	0.2030		mg/L		101	80 - 120		0	20
Zinc	0.200	0.2115		mg/L		106	80 - 120		6	20
Selenium	0.200	0.2104		mg/L		105	80 - 120		0	20
Chromium	0.200	0.2123		mg/L		106	80 - 120		4	20

Lab Sample ID: 480-47378-6 MS

Matrix: Water

Analysis Batch: 143999

Client Sample ID: WCMW-7 MS

Prep Type: Dissolved

Prep Batch: 143362

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	
Cadmium	<0.00100		0.200	0.2169		mg/L		108	75 - 125	
Antimony	<0.00600		0.200	0.2134		mg/L		107	75 - 125	
Beryllium	<0.00100		0.200	0.2061		mg/L		103	75 - 125	
Barium	0.420		0.200	0.6301		mg/L		105	75 - 125	
Thallium	<0.0100		0.200	0.2014		mg/L		101	75 - 125	
Nickel	0.00376	J	0.200	0.2118		mg/L		104	75 - 125	
Vanadium	<0.0100		0.200	0.2009		mg/L		100	75 - 125	
Silver	<0.00500		0.0500	0.05141		mg/L		103	75 - 125	
Arsenic	<0.0100		0.200	0.2243		mg/L		112	75 - 125	
Lead	<0.00500		0.200	0.2087		mg/L		104	75 - 125	

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: 480-47378-6 MS

Matrix: Water

Analysis Batch: 143999

Client Sample ID: WCMW-7 MS

Prep Type: Dissolved

Prep Batch: 143362

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	0.0130	J	0.200	0.1985		mg/L		93	75 - 125
Selenium	<0.0100		0.200	0.2239		mg/L		112	75 - 125
Chromium	0.00176	J	0.200	0.1981		mg/L		98	75 - 125

Lab Sample ID: 480-47378-6 MSD

Matrix: Water

Analysis Batch: 143999

Client Sample ID: WCMW-7 MSD

Prep Type: Dissolved

Prep Batch: 143362

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Cadmium	<0.00100		0.200	0.2193		mg/L		110	75 - 125	1	20
Antimony	<0.00600		0.200	0.2154		mg/L		108	75 - 125	1	20
Beryllium	<0.00100		0.200	0.2064		mg/L		103	75 - 125	0	20
Barium	0.420		0.200	0.6180		mg/L		99	75 - 125	2	20
Thallium	<0.0100		0.200	0.2044		mg/L		102	75 - 125	1	20
Nickel	0.00376	J	0.200	0.2161		mg/L		106	75 - 125	2	20
Vanadium	<0.0100		0.200	0.2048		mg/L		102	75 - 125	2	20
Silver	<0.00500		0.0500	0.05182		mg/L		104	75 - 125	1	20
Arsenic	<0.0100		0.200	0.2269		mg/L		113	75 - 125	1	20
Lead	<0.00500		0.200	0.2113		mg/L		106	75 - 125	1	20
Zinc	0.0130	J	0.200	0.2035		mg/L		95	75 - 125	2	20
Selenium	<0.0100		0.200	0.2228		mg/L		111	75 - 125	1	20
Chromium	0.00176	J	0.200	0.2025		mg/L		100	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-143629/1-A

Matrix: Water

Analysis Batch: 143802

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 143629

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000200		0.000200	0.000120	mg/L		10/09/13 08:15	10/09/13 13:11	1

Lab Sample ID: LCS 480-143629/2-A

Matrix: Water

Analysis Batch: 143802

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 143629

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.0133	0.01252		mg/L		94	80 - 120

Lab Sample ID: LCSD 480-143629/3-A

Matrix: Water

Analysis Batch: 143802

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 143629

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	0.0133	0.01182		mg/L		89	80 - 120	6	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 480-47378-6 MS

Matrix: Water

Analysis Batch: 143802

Client Sample ID: WCMW-7 MS

Prep Type: Dissolved

Prep Batch: 143629

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.000200		0.00667	0.006383		mg/L		96	75 - 125

Lab Sample ID: 480-47378-6 MSD

Matrix: Water

Analysis Batch: 143802

Client Sample ID: WCMW-7 MSD

Prep Type: Dissolved

Prep Batch: 143629

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000200		0.00667	0.006383		mg/L		96	75 - 125	0	20

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

GC/MS VOA

Analysis Batch: 144314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-1	WCMW-6	Total/NA	Water	8260C	
480-47378-2	WCMW-10	Total/NA	Water	8260C	
480-47378-3	WCMW-5	Total/NA	Water	8260C	
480-47378-4	WCMW-9	Total/NA	Water	8260C	
480-47378-5	WCMW-2	Total/NA	Water	8260C	
480-47378-6	WCMW-7	Total/NA	Water	8260C	
480-47378-8	MW-2R	Total/NA	Water	8260C	
480-47378-9	WCMW-8	Total/NA	Water	8260C	
480-47378-10	WCMW-11	Total/NA	Water	8260C	
480-47378-11	WCMW-4	Total/NA	Water	8260C	
480-47378-12	WCMW-1	Total/NA	Water	8260C	
480-47378-13	MW-1R	Total/NA	Water	8260C	
480-47378-14	TB-10032013	Total/NA	Water	8260C	
480-47378-15	MW-3R	Total/NA	Water	8260C	
480-47378-16	WCMW-3	Total/NA	Water	8260C	
480-47378-17	MW-4R	Total/NA	Water	8260C	
LCS 480-144314/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-144314/6	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-144314/8	Method Blank	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 143366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-1	WCMW-6	Total/NA	Water	MAVPH	
480-47378-2	WCMW-10	Total/NA	Water	MAVPH	
480-47378-3	WCMW-5	Total/NA	Water	MAVPH	
480-47378-4	WCMW-9	Total/NA	Water	MAVPH	
480-47378-5	WCMW-2	Total/NA	Water	MAVPH	
480-47378-6	WCMW-7	Total/NA	Water	MAVPH	
480-47378-8	MW-2R	Total/NA	Water	MAVPH	
480-47378-9	WCMW-8	Total/NA	Water	MAVPH	
480-47378-10	WCMW-11	Total/NA	Water	MAVPH	
480-47378-11	WCMW-4	Total/NA	Water	MAVPH	
480-47378-12	WCMW-1	Total/NA	Water	MAVPH	
480-47378-13	MW-1R	Total/NA	Water	MAVPH	
480-47378-15	MW-3R	Total/NA	Water	MAVPH	
480-47378-16	WCMW-3	Total/NA	Water	MAVPH	
LCS 480-143366/4	Lab Control Sample	Total/NA	Water	MAVPH	
LCSD 480-143366/5	Lab Control Sample Dup	Total/NA	Water	MAVPH	
MB 480-143366/3	Method Blank	Total/NA	Water	MAVPH	

Analysis Batch: 143687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-17	MW-4R	Total/NA	Water	MAVPH	
LCS 480-143687/4	Lab Control Sample	Total/NA	Water	MAVPH	
LCSD 480-143687/5	Lab Control Sample Dup	Total/NA	Water	MAVPH	
MB 480-143687/3	Method Blank	Total/NA	Water	MAVPH	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

GC VOA (Continued)

Analysis Batch: 143830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-1	WCMW-6	Total/NA	Water	MA VPH	
480-47378-2	WCMW-10	Total/NA	Water	MA VPH	
480-47378-3	WCMW-5	Total/NA	Water	MA VPH	
480-47378-4	WCMW-9	Total/NA	Water	MA VPH	
480-47378-5	WCMW-2	Total/NA	Water	MA VPH	
480-47378-6	WCMW-7	Total/NA	Water	MA VPH	
480-47378-8	MW-2R	Total/NA	Water	MA VPH	
480-47378-9	WCMW-8	Total/NA	Water	MA VPH	
480-47378-10	WCMW-11	Total/NA	Water	MA VPH	
480-47378-11	WCMW-4	Total/NA	Water	MA VPH	
480-47378-12	WCMW-1	Total/NA	Water	MA VPH	
480-47378-13	MW-1R	Total/NA	Water	MA VPH	
480-47378-15	MW-3R	Total/NA	Water	MA VPH	
480-47378-16	WCMW-3	Total/NA	Water	MA VPH	
480-47378-17	MW-4R	Total/NA	Water	MA VPH	

GC Semi VOA

Prep Batch: 144324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-1	WCMW-6	Total/NA	Water	3510C	
480-47378-2	WCMW-10	Total/NA	Water	3510C	
480-47378-3	WCMW-5	Total/NA	Water	3510C	
480-47378-4	WCMW-9	Total/NA	Water	3510C	
480-47378-5	WCMW-2	Total/NA	Water	3510C	
480-47378-6	WCMW-7	Total/NA	Water	3510C	
480-47378-7	WCMW-907	Total/NA	Water	3510C	
480-47378-8	MW-2R	Total/NA	Water	3510C	
480-47378-9	WCMW-8	Total/NA	Water	3510C	
480-47378-10	WCMW-11	Total/NA	Water	3510C	
480-47378-11	WCMW-4	Total/NA	Water	3510C	
480-47378-12	WCMW-1	Total/NA	Water	3510C	
480-47378-13	MW-1R	Total/NA	Water	3510C	
480-47378-15	MW-3R	Total/NA	Water	3510C	
480-47378-16	WCMW-3	Total/NA	Water	3510C	
480-47378-17	MW-4R	Total/NA	Water	3510C	
LCS 480-144324/2-B	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-144324/3-B	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-144324/1-B	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 144342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-1	WCMW-6	Total/NA	Water	MA-EPH	144416
480-47378-2	WCMW-10	Total/NA	Water	MA-EPH	144416
480-47378-3	WCMW-5	Total/NA	Water	MA-EPH	144416
480-47378-4	WCMW-9	Total/NA	Water	MA-EPH	144416
480-47378-5	WCMW-2	Total/NA	Water	MA-EPH	144416
480-47378-6	WCMW-7	Total/NA	Water	MA-EPH	144416
480-47378-7	WCMW-907	Total/NA	Water	MA-EPH	144416
480-47378-9	WCMW-8	Total/NA	Water	MA-EPH	144416

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

GC Semi VOA (Continued)

Analysis Batch: 144342 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-10	WCMW-11	Total/NA	Water	MA-EPH	144416
480-47378-11	WCMW-4	Total/NA	Water	MA-EPH	144416
480-47378-12	WCMW-1	Total/NA	Water	MA-EPH	144416
480-47378-13	MW-1R	Total/NA	Water	MA-EPH	144416
480-47378-15	MW-3R	Total/NA	Water	MA-EPH	144416
480-47378-16	WCMW-3	Total/NA	Water	MA-EPH	144416
LCS 480-144324/2-B	Lab Control Sample	Total/NA	Water	MA-EPH	144416
LCSD 480-144324/3-B	Lab Control Sample Dup	Total/NA	Water	MA-EPH	144416
MB 480-144324/1-B	Method Blank	Total/NA	Water	MA-EPH	144416

Fraction Batch: 144416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-1	WCMW-6	Total/NA	Water	MA EPH Frac	144324
480-47378-2	WCMW-10	Total/NA	Water	MA EPH Frac	144324
480-47378-3	WCMW-5	Total/NA	Water	MA EPH Frac	144324
480-47378-4	WCMW-9	Total/NA	Water	MA EPH Frac	144324
480-47378-5	WCMW-2	Total/NA	Water	MA EPH Frac	144324
480-47378-6	WCMW-7	Total/NA	Water	MA EPH Frac	144324
480-47378-7	WCMW-907	Total/NA	Water	MA EPH Frac	144324
480-47378-8	MW-2R	Total/NA	Water	MA EPH Frac	144324
480-47378-9	WCMW-8	Total/NA	Water	MA EPH Frac	144324
480-47378-10	WCMW-11	Total/NA	Water	MA EPH Frac	144324
480-47378-11	WCMW-4	Total/NA	Water	MA EPH Frac	144324
480-47378-12	WCMW-1	Total/NA	Water	MA EPH Frac	144324
480-47378-13	MW-1R	Total/NA	Water	MA EPH Frac	144324
480-47378-15	MW-3R	Total/NA	Water	MA EPH Frac	144324
480-47378-16	WCMW-3	Total/NA	Water	MA EPH Frac	144324
480-47378-17	MW-4R	Total/NA	Water	MA EPH Frac	144324
LCS 480-144324/2-B	Lab Control Sample	Total/NA	Water	MA EPH Frac	144324
LCSD 480-144324/3-B	Lab Control Sample Dup	Total/NA	Water	MA EPH Frac	144324
MB 480-144324/1-B	Method Blank	Total/NA	Water	MA EPH Frac	144324

Analysis Batch: 144661

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-8	MW-2R	Total/NA	Water	MA-EPH	144416
480-47378-17	MW-4R	Total/NA	Water	MA-EPH	144416

Analysis Batch: 144815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-1	WCMW-6	Total/NA	Water	MA-EPH	
480-47378-2	WCMW-10	Total/NA	Water	MA-EPH	
480-47378-3	WCMW-5	Total/NA	Water	MA-EPH	
480-47378-4	WCMW-9	Total/NA	Water	MA-EPH	
480-47378-5	WCMW-2	Total/NA	Water	MA-EPH	
480-47378-6	WCMW-7	Total/NA	Water	MA-EPH	
480-47378-7	WCMW-907	Total/NA	Water	MA-EPH	
480-47378-8	MW-2R	Total/NA	Water	MA-EPH	
480-47378-9	WCMW-8	Total/NA	Water	MA-EPH	
480-47378-10	WCMW-11	Total/NA	Water	MA-EPH	
480-47378-11	WCMW-4	Total/NA	Water	MA-EPH	
480-47378-12	WCMW-1	Total/NA	Water	MA-EPH	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

GC Semi VOA (Continued)

Analysis Batch: 144815 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-13	MW-1R	Total/NA	Water	MA-EPH	
480-47378-15	MW-3R	Total/NA	Water	MA-EPH	
480-47378-16	WCMW-3	Total/NA	Water	MA-EPH	
480-47378-17	MW-4R	Total/NA	Water	MA-EPH	

Metals

Filtration Batch: 143019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-143019/18-B	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 480-143019/31-B	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
MB 480-143019/17-B	Method Blank	Dissolved	Water	FILTRATION	

Prep Batch: 143362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-1	WCMW-6	Dissolved	Water	3005A	
480-47378-2	WCMW-10	Dissolved	Water	3005A	
480-47378-3	WCMW-5	Dissolved	Water	3005A	
480-47378-4	WCMW-9	Dissolved	Water	3005A	
480-47378-5	WCMW-2	Dissolved	Water	3005A	
480-47378-6	WCMW-7	Dissolved	Water	3005A	
480-47378-6 MS	WCMW-7 MS	Dissolved	Water	3005A	
480-47378-6 MSD	WCMW-7 MSD	Dissolved	Water	3005A	
480-47378-7	WCMW-907	Dissolved	Water	3005A	
480-47378-8	MW-2R	Dissolved	Water	3005A	
480-47378-9	WCMW-8	Dissolved	Water	3005A	
480-47378-10	WCMW-11	Dissolved	Water	3005A	
480-47378-11	WCMW-4	Dissolved	Water	3005A	
480-47378-12	WCMW-1	Dissolved	Water	3005A	
480-47378-13	MW-1R	Dissolved	Water	3005A	
480-47378-15	MW-3R	Dissolved	Water	3005A	
480-47378-16	WCMW-3	Dissolved	Water	3005A	
480-47378-17	MW-4R	Dissolved	Water	3005A	
LCS 480-143019/18-B	Lab Control Sample	Dissolved	Water	3005A	143019
LCSD 480-143019/31-B	Lab Control Sample Dup	Dissolved	Water	3005A	143019
MB 480-143019/17-B	Method Blank	Dissolved	Water	3005A	143019

Prep Batch: 143629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-1	WCMW-6	Dissolved	Water	7470A	
480-47378-2	WCMW-10	Dissolved	Water	7470A	
480-47378-3	WCMW-5	Dissolved	Water	7470A	
480-47378-4	WCMW-9	Dissolved	Water	7470A	
480-47378-5	WCMW-2	Dissolved	Water	7470A	
480-47378-6	WCMW-7	Dissolved	Water	7470A	
480-47378-6 MS	WCMW-7 MS	Dissolved	Water	7470A	
480-47378-6 MSD	WCMW-7 MSD	Dissolved	Water	7470A	
480-47378-7	WCMW-907	Dissolved	Water	7470A	
480-47378-8	MW-2R	Dissolved	Water	7470A	
480-47378-9	WCMW-8	Dissolved	Water	7470A	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Metals (Continued)

Prep Batch: 143629 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-10	WCMW-11	Dissolved	Water	7470A	
480-47378-11	WCMW-4	Dissolved	Water	7470A	
480-47378-12	WCMW-1	Dissolved	Water	7470A	
480-47378-13	MW-1R	Dissolved	Water	7470A	
480-47378-15	MW-3R	Dissolved	Water	7470A	
480-47378-16	WCMW-3	Dissolved	Water	7470A	
480-47378-17	MW-4R	Dissolved	Water	7470A	
LCS 480-143629/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 480-143629/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
MB 480-143629/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 143802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-1	WCMW-6	Dissolved	Water	7470A	143629
480-47378-2	WCMW-10	Dissolved	Water	7470A	143629
480-47378-3	WCMW-5	Dissolved	Water	7470A	143629
480-47378-4	WCMW-9	Dissolved	Water	7470A	143629
480-47378-5	WCMW-2	Dissolved	Water	7470A	143629
480-47378-6	WCMW-7	Dissolved	Water	7470A	143629
480-47378-6 MS	WCMW-7 MS	Dissolved	Water	7470A	143629
480-47378-6 MSD	WCMW-7 MSD	Dissolved	Water	7470A	143629
480-47378-7	WCMW-907	Dissolved	Water	7470A	143629
480-47378-8	MW-2R	Dissolved	Water	7470A	143629
480-47378-9	WCMW-8	Dissolved	Water	7470A	143629
480-47378-10	WCMW-11	Dissolved	Water	7470A	143629
480-47378-11	WCMW-4	Dissolved	Water	7470A	143629
480-47378-12	WCMW-1	Dissolved	Water	7470A	143629
480-47378-13	MW-1R	Dissolved	Water	7470A	143629
480-47378-15	MW-3R	Dissolved	Water	7470A	143629
480-47378-16	WCMW-3	Dissolved	Water	7470A	143629
480-47378-17	MW-4R	Dissolved	Water	7470A	143629
LCS 480-143629/2-A	Lab Control Sample	Total/NA	Water	7470A	143629
LCSD 480-143629/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	143629
MB 480-143629/1-A	Method Blank	Total/NA	Water	7470A	143629

Analysis Batch: 143999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-2	WCMW-10	Dissolved	Water	6010	143362
480-47378-3	WCMW-5	Dissolved	Water	6010	143362
480-47378-4	WCMW-9	Dissolved	Water	6010	143362
480-47378-5	WCMW-2	Dissolved	Water	6010	143362
480-47378-6	WCMW-7	Dissolved	Water	6010	143362
480-47378-6 MS	WCMW-7 MS	Dissolved	Water	6010	143362
480-47378-6 MSD	WCMW-7 MSD	Dissolved	Water	6010	143362
480-47378-7	WCMW-907	Dissolved	Water	6010	143362
480-47378-8	MW-2R	Dissolved	Water	6010	143362
480-47378-9	WCMW-8	Dissolved	Water	6010	143362
480-47378-10	WCMW-11	Dissolved	Water	6010	143362
480-47378-11	WCMW-4	Dissolved	Water	6010	143362
480-47378-12	WCMW-1	Dissolved	Water	6010	143362
480-47378-13	MW-1R	Dissolved	Water	6010	143362

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Metals (Continued)

Analysis Batch: 143999 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-15	MW-3R	Dissolved	Water	6010	143362
480-47378-16	WCMW-3	Dissolved	Water	6010	143362
480-47378-17	MW-4R	Dissolved	Water	6010	143362

Analysis Batch: 144286

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-47378-1	WCMW-6	Dissolved	Water	6010	143362
LCS 480-143019/18-B	Lab Control Sample	Dissolved	Water	6010	143362
LCSD 480-143019/31-B	Lab Control Sample Dup	Dissolved	Water	6010	143362
MB 480-143019/17-B	Method Blank	Dissolved	Water	6010	143362

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-6

Date Collected: 10/03/13 08:42

Date Received: 10/08/13 01:25

Lab Sample ID: 480-47378-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 17:37	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 11:15	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 16:29	DGB	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:16	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	144286	10/10/13 20:20	AMH	TAL BUF

Client Sample ID: WCMW-10

Date Collected: 10/03/13 09:45

Date Received: 10/08/13 01:25

Lab Sample ID: 480-47378-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 18:02	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 11:53	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 17:39	GSR	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 16:59	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:18	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 19:52	AMH	TAL BUF

Client Sample ID: WCMW-5

Date Collected: 10/03/13 10:42

Date Received: 10/08/13 01:25

Lab Sample ID: 480-47378-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 18:27	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 12:32	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 17:29	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-5

Lab Sample ID: 480-47378-3

Date Collected: 10/03/13 10:42

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	143802	10/09/13 13:20	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 19:54	AMH	TAL BUF

Client Sample ID: WCMW-9

Lab Sample ID: 480-47378-4

Date Collected: 10/03/13 10:58

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 18:52	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 13:10	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 17:58	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:21	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 19:57	AMH	TAL BUF

Client Sample ID: WCMW-2

Lab Sample ID: 480-47378-5

Date Collected: 10/03/13 11:42

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 19:17	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 13:51	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 18:28	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:27	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 20:00	AMH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-7

Lab Sample ID: 480-47378-6

Date Collected: 10/03/13 12:17

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	144314	10/11/13 19:43	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 14:36	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 18:57	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:28	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 20:02	AMH	TAL BUF

Client Sample ID: WCMW-907

Lab Sample ID: 480-47378-7

Date Collected: 10/03/13 12:17

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 19:27	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:36	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 20:22	AMH	TAL BUF

Client Sample ID: MW-2R

Lab Sample ID: 480-47378-8

Date Collected: 10/03/13 12:27

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 20:08	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 15:15	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Analysis	MA-EPH		1	144661	10/14/13 13:32	DGB	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:38	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 20:25	AMH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-8

Lab Sample ID: 480-47378-9

Date Collected: 10/03/13 14:07

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 20:33	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 16:31	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 20:56	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:39	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 20:28	AMH	TAL BUF

Client Sample ID: WCMW-11

Lab Sample ID: 480-47378-10

Date Collected: 10/03/13 14:20

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 20:59	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 17:10	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 21:25	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:41	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 20:30	AMH	TAL BUF

Client Sample ID: WCMW-4

Lab Sample ID: 480-47378-11

Date Collected: 10/03/13 14:52

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 21:24	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 17:48	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 21:54	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: WCMW-4

Lab Sample ID: 480-47378-11

Date Collected: 10/03/13 14:52

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	143802	10/09/13 13:43	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 20:33	AMH	TAL BUF

Client Sample ID: WCMW-1

Lab Sample ID: 480-47378-12

Date Collected: 10/03/13 15:42

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 21:49	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 18:27	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 22:24	DGB	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:48	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 20:35	AMH	TAL BUF

Client Sample ID: MW-1R

Lab Sample ID: 480-47378-13

Date Collected: 10/03/13 15:50

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 22:15	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 19:05	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 22:53	DGB	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:50	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 20:38	AMH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: TB-10032013

Lab Sample ID: 480-47378-14

Date Collected: 10/03/13 12:00

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	144314	10/11/13 22:40	PJQ	TAL BUF

Client Sample ID: MW-3R

Lab Sample ID: 480-47378-15

Date Collected: 10/04/13 09:05

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 23:05	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 19:43	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 23:24	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:52	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 20:40	AMH	TAL BUF

Client Sample ID: WCMW-3

Lab Sample ID: 480-47378-16

Date Collected: 10/04/13 10:07

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 23:30	PJQ	TAL BUF
Total/NA	Analysis	MAVPH		10	143366	10/08/13 20:22	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144342	10/12/13 23:53	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 13:53	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 20:43	AMH	TAL BUF

Client Sample ID: MW-4R

Lab Sample ID: 480-47378-17

Date Collected: 10/04/13 11:17

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	144314	10/11/13 23:56	PJQ	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Client Sample ID: MW-4R

Lab Sample ID: 480-47378-17

Date Collected: 10/04/13 11:17

Matrix: Water

Date Received: 10/08/13 01:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	MAVPH		10	143687	10/09/13 12:11	CMD	TAL BUF
Total/NA	Analysis	MA VPH		10	143830	10/09/13 16:39	GSR	TAL BUF
Total/NA	Fraction	MA EPH Frac			144416	10/11/13 14:49	TRG	TAL BUF
Total/NA	Analysis	MA-EPH		1	144661	10/14/13 14:01	DGB	TAL BUF
Total/NA	Prep	3510C			144324	10/11/13 11:32	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	144815	10/14/13 15:11	DGB	TAL BUF
Dissolved	Prep	7470A			143629	10/09/13 08:15	JRK	TAL BUF
Dissolved	Analysis	7470A		1	143802	10/09/13 14:00	JRK	TAL BUF
Dissolved	Prep	3005A			143362	10/08/13 08:10	SS1	TAL BUF
Dissolved	Analysis	6010		1	143999	10/09/13 20:53	AMH	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-13 *
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Iowa	State Program	7	374	03-15-15
Kansas	NELAP	7	E-10187	01-31-14
Kentucky	State Program	4	90029	12-31-13
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-13
New Hampshire	NELAP	1	2973	09-11-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	04-01-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-31-13
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14
West Virginia DEP	State Program	3	252	12-31-13
Wisconsin	State Program	5	998310390	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
MA VPH	Massachusetts - Volatile Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
MAVPH	Massachusetts - Volatile Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
MA-EPH	Massachusetts - Extractable Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-47378-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-47378-1	WCMW-6	Water	10/03/13 08:42	10/08/13 01:25
480-47378-2	WCMW-10	Water	10/03/13 09:45	10/08/13 01:25
480-47378-3	WCMW-5	Water	10/03/13 10:42	10/08/13 01:25
480-47378-4	WCMW-9	Water	10/03/13 10:58	10/08/13 01:25
480-47378-5	WCMW-2	Water	10/03/13 11:42	10/08/13 01:25
480-47378-6	WCMW-7	Water	10/03/13 12:17	10/08/13 01:25
480-47378-7	WCMW-907	Water	10/03/13 12:17	10/08/13 01:25
480-47378-8	MW-2R	Water	10/03/13 12:27	10/08/13 01:25
480-47378-9	WCMW-8	Water	10/03/13 14:07	10/08/13 01:25
480-47378-10	WCMW-11	Water	10/03/13 14:20	10/08/13 01:25
480-47378-11	WCMW-4	Water	10/03/13 14:52	10/08/13 01:25
480-47378-12	WCMW-1	Water	10/03/13 15:42	10/08/13 01:25
480-47378-13	MW-1R	Water	10/03/13 15:50	10/08/13 01:25
480-47378-14	TB-10032013	Water	10/03/13 12:00	10/08/13 01:25
480-47378-15	MW-3R	Water	10/04/13 09:05	10/08/13 01:25
480-47378-16	WCMW-3	Water	10/04/13 10:07	10/08/13 01:25
480-47378-17	MW-4R	Water	10/04/13 11:17	10/08/13 01:25

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica


THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client <u>Woodard & Curran</u>			Project Manager <u>Andrea Harvey</u>			Date <u>10/4/13</u>	Chain of Custody Number <u>255518</u>
Address <u>95 Cedar St, Ste 100</u>			Telephone Number (Area Code)/Fax/Number <u>401-275-1007, aharvey@woodardcurran.com</u>			Lab Number	Page <u>1</u> of <u>2</u>
City <u>Providence</u>	State <u>RI</u>	Zip Code <u>02903</u>	Site Contact <u>Andrea Harvey</u>		Lab Contact <u>Becky Mason</u>	Analysis (Attach list if more space is needed)	
Project Name and Location (State) <u>Quincy - Intervale, Quincy, MA</u>			Carrier/Waybill Number				
Contract/Purchase Order/Quote No.							

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix				Containers & Preservatives						Special Instructions/ Conditions of Receipt			
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	DSS MCP 1	VOC (S)	EPH (M)	VPH (M)
LCMW-6	10/3/13	842	X					X	X			X	X	X	X	<u>NOTE:</u> 1. Fractions only for 2. Fractions of target analytes for E 3. All dissolved metals were field filtered → MS: Matrix Spike → MSD: Matrix Spike
LCMW-10		945	X					X	X			X	X	X	X	
LCMW-5		1042	X					X	X			X	X	X	X	
LCMW-9		1058	X					X	X			X	X	X	X	
LCMW-2		1142	X					X	X			X	X	X	X	
LCMW-7		1217	X					X	X			X	X	X	X	
LCMW-7 MS		1217	X					X				X				
LCMW-7 MSD		1217	X					X				X				
LCMW-907		1217	X					X	X			X	X			
HW-2R		1227	X					X	X			X	X	X	X	
LCMW-8		1407	X					X	X			X	X	X	X	
LCMW-11		1420	X					X	X			X	X	X	X	

Possible Hazard Identification



Possible Hazard Identification			Sample Disposal		
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown			<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months (longer than 1 month)		
Turn Around Time Required			QC Requirements (Specify)		
<input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input checked="" type="checkbox"/> Other <u>Standard</u>			<u>ICP-AES methods required; report to 612-1/3-1 Standard</u> <u>GIS Key & Excel with EDD</u>		
1. Relinquished By <u>[Signature]</u>		Date <u>10/7/13</u> Time <u>10:15</u>	1. Received By <u>[Signature]</u>		Date <u>10/7/13</u> Time <u>10:15</u>
2. Relinquished By <u>[Signature]</u>		Date <u>10/7/13</u> Time <u>11:30</u>	2. Received By <u>[Signature]</u>		Date <u>10/8/13</u> Time <u>12:5</u>
3. Relinquished By		Date	3. Received By		Date
Comments					

Temp 3.0 4.2 2.8 ICP#1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-47378-1

Login Number: 47378

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	woodard & curran
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-53903-1

Client Project/Site: Quincy Inervale

Revision: 2

For:


Woodard & Curran Inc

40 Shattuck Road

Suite 110

Andover, Massachusetts 01810

Attn: Mr. Jarrod Yoder



Authorized for release by:

2/7/2014 10:44:40 AM

Becky Mason, Project Manager II

(413)572-4000

becky.mason@testamericainc.com

LINKS

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results through

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

MassDEP Analytical Protocol Certification Form					
Laboratory Name: TestAmerica Buffalo		Project #: 480-53903			
Project Location: Quincy Inervale		RTN:			
This form provides certifications for the data set for the following Laboratory Sample ID Number(s): 480-53903 [1-14, 16, 17]					
Matrices: <input checked="" type="checkbox"/> Groundwater/Surface Water <input type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
CAM Protocols (check all that apply below):					
8260 VOC CAM II A <input checked="" type="checkbox"/>	7470/7471 Hg CAM III B <input checked="" type="checkbox"/>	Mass DEP VPH CAM IV A <input checked="" type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input type="checkbox"/>	Mass DEP EPH CAM IV B <input checked="" type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input checked="" type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input type="checkbox"/>	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Responses to Questions G, H and I below are required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
<i>Data User Note: Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350</i>					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
¹ All negative responses must be addressed in an attached laboratory narrative.					
<i>I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.</i>					
Signature:		Position: <u>Technical Director, TestAmerica Westfield</u>			
Printed Name: <u>Richard Emerich</u>		Date: <u>2/5/14 16:26</u>			
This form has been electronically signed and approved.					

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Job ID: 480-53903-1

Laboratory: TestAmerica Buffalo

Narrative

Revised report: per client request changed units for metals reporting. Also changed formatter for reporting data. This report replaces final report dated 2/5/14.

Receipt

The samples were received on 1/29/2014 at 1:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 2.2° C, 2.2° C, 2.4° C and 2.7° C.

Receipt Notes and Exceptions

The client requested a formatter change at 4:21PM on the due date.

GC/MS VOA

Method 8260C: With the exception of diluted samples, per question G on the MassDEP Analytical Protocol Certification Form, TestAmerica's routine reporting limits do not achieve the CAM reporting limits specified in this CAM protocol for 1,2-dibromo-3-chloropropane, Carbon Disulfide, Isopropyl Ether, Naphthalene, tert-Butyl Ethyl Ether, tert-Amyl Methyl Ether and Tetrahydrofuran.

Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-3R (480-53903-13), WCMW-10 (480-53903-16), WCMW-9 (480-53903-14), MW-1R (480-53903-2), MW-2R (480-53903-6), MW-4R (480-53903-5), WCMW-11 (480-53903-1), WCMW-2 (480-53903-9), WCMW-5 (480-53903-8) and WCMW-6 (480-53903-7). Elevated reporting limits (RLs) are provided.

Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: WCMW-7 (480-53903-3). Elevated reporting limits (RLs) are provided.

Method 8260C: The continuing calibration verification (CCV) 1,4-Dioxane associated with batches 163849 and 164048 recovered above the MCP upper control limit. MCP protocol allows for 20% of the target compounds to be outside the 20% difference but not over 40% difference.

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batches 163849 and 163954 exceeded control limits for the following analyte: Tetrahydrofuran. MCP protocol allows for 10% of the target compounds to be outside of the limits provided the recoveries are over 10%.

Method 8260C: The laboratory control sample (LCS) and the laboratory control sample duplicate (LCSD) for batches 163849 and 164048 exceeded control limits for the following analyte: 2-Butanone. Unlike the calibration standards, this is due to the coelution with Ethyl Acetate in the spiking solution. This does not indicate a performance issue with the spike recovery, but rather the laboratory's ability to measure the two analytes together in a combined spiking solution. Through the use of spectral analysis, the two compounds can be distinguished from one another if present in a client sample.

No other analytical or quality issues were noted.

GC VOA

Method MAVPH: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-4R (480-53903-5). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

GC Semi VOA

Method MA-EPH: Surrogate recovery for the following sample was outside control limits: MW-4R (480-53903-5), MW-1R (480-53903-2), MW-3R (480-53903-13), WCMW-10 (480-53903-16), WCMW-11 (480-53903-1), WCMW-2 (480-53903-9), WCMW-3 (480-53903-12), WCMW-5 (480-53903-8), WCMW-6 (480-53903-7), WCMW-7 (480-53903-3), WCMW-9 (480-53903-14), WCMW-907 (480-53903-4), and MW-2R (480-53903-6). Non-chromatographic evidence of matrix interference was present so re-extraction and/or re-analysis was not performed. Refer to the QC report for details.

No other analytical or quality issues were noted.

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Job ID: 480-53903-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Metals

Method 6010: The Method Blank for batch 163657 contained soluble zinc above the method detection limit. This target analyte concentration was less than the reporting limit (RL) so re-extraction and/or re-analysis of samples MW-1R (480-53903-2), WCMW-10 (480-53903-16), WCMW-5 (480-53903-8), WCMW-7 (480-53903-3), WCMW-907 (480-53903-4), (480-53903-5 PDS), (480-53903-5 SD), MW-2R (480-53903-6), MW-3R (480-53903-13), MW-4R (480-53903-5), MW-4R MS (480-53903-5 MS), MW-4R MSD (480-53903-5 MSD), WCMW-1 (480-53903-11), WCMW-11 (480-53903-1), WCMW-2 (480-53903-9), WCMW-3 (480-53903-12), WCMW-4 (480-53903-10), WCMW-6 (480-53903-7) and WCMW-8 (480-53903-17) was not performed.

No other analytical or quality issues were noted.

Organic Prep

Method 3510C/MAEPH: After hexane exchanging the following sample extracts, in preparation for fractionation, the extracts formed a white precipitate. The entire extract, including the precipitate, was applied to the fractionation column and the extraction procedure continued for the following samples: MW-1R (480-53903-2), MW-2R (480-53903-6), MW-3R (480-53903-13), MW-4R (480-53903-5), WCMW-1 (480-53903-11), WCMW-10 (480-53903-16), WCMW-11 (480-53903-1), WCMW-2 (480-53903-9), WCMW-3 (480-53903-12), WCMW-4 (480-53903-10), WCMW-5 (480-53903-8), WCMW-6 (480-53903-7), WCMW-7 (480-53903-3), WCMW-8 (480-53903-17), WCMW-9 (480-53903-14) and WCMW-907 (480-53903-4).

No other analytical or quality issues were noted.

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-11

Lab Sample ID: 480-53903-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	9.11		5.00	1.80	ug/L	5		8260C	Total/NA
C5-C8 Aliphatics (unadjusted)	1.79	J	5.00	1.50	ug/L	1		MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	14.9	J B	47.3	9.47	ug/L	1		MA-EPH	Total/NA
Barium	48.4		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	11.4		10.0	1.26	ug/L	1		6010	Dissolved
Zinc	374	B	50.0	1.50	ug/L	1		6010	Dissolved

Client Sample ID: MW-1R

Lab Sample ID: 480-53903-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (unadjusted)	15.5	J B	47.7	9.55	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	23.6	J	47.7	9.55	ug/L	1		MA-EPH	Total/NA
Barium	94.7		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	4.30	J	10.0	1.26	ug/L	1		6010	Dissolved
Vanadium	1.92	J	10.0	1.50	ug/L	1		6010	Dissolved
Zinc	7.64	J B	50.0	1.50	ug/L	1		6010	Dissolved

Client Sample ID: WCMW-7

Lab Sample ID: 480-53903-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	109		2.00	1.62	ug/L	2		8260C	Total/NA
Methyl tert-butyl ether	2.00		2.00	0.320	ug/L	2		8260C	Total/NA
Trichloroethene	7.53		2.00	0.920	ug/L	2		8260C	Total/NA
Vinyl chloride	3.66		2.00	1.80	ug/L	2		8260C	Total/NA
C5-C8 Aliphatics (adjusted)	1.93	J	5.00	1.50	ug/L	1		MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	4.15	J	5.00	1.50	ug/L	1		MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	15.6	J B	47.3	9.46	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	17.4	J B	47.3	9.46	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	12.4	J	47.3	9.46	ug/L	1		MA-EPH	Total/NA
Barium	297		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	4.57	J	10.0	1.26	ug/L	1		6010	Dissolved
Vanadium	1.72	J	10.0	1.50	ug/L	1		6010	Dissolved
Zinc	6.32	J B	50.0	1.50	ug/L	1		6010	Dissolved

Client Sample ID: WCMW-907

Lab Sample ID: 480-53903-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (unadjusted)	15.2	J B	47.4	9.48	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	18.4	J	47.4	9.48	ug/L	1		MA-EPH	Total/NA
Barium	304		10.0	0.700	ug/L	1		6010	Dissolved
Vanadium	1.99	J	10.0	1.50	ug/L	1		6010	Dissolved
Zinc	5.37	J B	50.0	1.50	ug/L	1		6010	Dissolved

Client Sample ID: MW-4R

Lab Sample ID: 480-53903-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	20.4		5.00	0.800	ug/L	5		8260C	Total/NA
Naphthalene	44.5		25.0	2.15	ug/L	5		8260C	Total/NA
Tert-amyl methyl ether	3.00	J	25.0	1.35	ug/L	5		8260C	Total/NA
Tetrachloroethene	3.79	J	5.00	1.80	ug/L	5		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-4R (Continued)

Lab Sample ID: 480-53903-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C5-C8 Aliphatics (unadjusted)	9.95	J	25.0	7.50	ug/L	5		MAVPH	Total/NA
C9-C10 Aromatics	57.4		25.0	2.50	ug/L	5		MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	41.0		25.0	7.50	ug/L	5		MAVPH	Total/NA
2-Methylnaphthalene	4.81	J	9.53	1.91	ug/L	1		MA-EPH	Total/NA
Acenaphthene	26.6		9.53	1.91	ug/L	1		MA-EPH	Total/NA
Fluoranthene	2.12	J	9.53	1.91	ug/L	1		MA-EPH	Total/NA
Fluorene	22.0		9.53	1.91	ug/L	1		MA-EPH	Total/NA
Naphthalene	5.76	J	9.53	1.91	ug/L	1		MA-EPH	Total/NA
Phenanthrene	26.5		9.53	1.91	ug/L	1		MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	233	B	47.7	9.53	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	181		47.7	9.53	ug/L	1		MA-EPH	Total/NA
Barium	273		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	4.75	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	85.6	B	50.0	1.50	ug/L	1		6010	Dissolved
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (Adjusted)	145		50.0	50.0	ug/L	1		MA-EPH	Total/NA

Client Sample ID: MW-2R

Lab Sample ID: 480-53903-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.13	J	5.00	4.05	ug/L	5		8260C	Total/NA
Naphthalene	14.7	J	25.0	2.15	ug/L	5		8260C	Total/NA
Tetrachloroethene	4.40	J	5.00	1.80	ug/L	5		8260C	Total/NA
Vinyl chloride	5.19		5.00	4.50	ug/L	5		8260C	Total/NA
C5-C8 Aliphatics (unadjusted)	2.16	J	5.00	1.50	ug/L	1		MAVPH	Total/NA
C9-C10 Aromatics	3.14	J	5.00	0.500	ug/L	1		MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	2.31	J	5.00	1.50	ug/L	1		MAVPH	Total/NA
Acenaphthene	3.27	J	9.50	1.90	ug/L	1		MA-EPH	Total/NA
Fluorene	4.28	J	9.50	1.90	ug/L	1		MA-EPH	Total/NA
Phenanthrene	5.05	J	9.50	1.90	ug/L	1		MA-EPH	Total/NA
C11-C22 Aromatics (unadjusted)	37.1	J B	47.5	9.50	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	56.9		47.5	9.50	ug/L	1		MA-EPH	Total/NA
Barium	81.0		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	4.55	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	66.0	B	50.0	1.50	ug/L	1		6010	Dissolved

Client Sample ID: WCMW-6

Lab Sample ID: 480-53903-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C5-C8 Aliphatics (adjusted)	4.23	J	5.00	1.50	ug/L	1		MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	5.99		5.00	1.50	ug/L	1		MAVPH	Total/NA
C9-C10 Aromatics	0.506	J	5.00	0.500	ug/L	1		MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	17.9	J B	47.4	9.47	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	15.5	J	47.4	9.47	ug/L	1		MA-EPH	Total/NA
Barium	187		10.0	0.700	ug/L	1		6010	Dissolved
Cadmium	6.52		1.00	0.500	ug/L	1		6010	Dissolved
Nickel	42.1		10.0	1.26	ug/L	1		6010	Dissolved
Zinc	2200	B	50.0	1.50	ug/L	1		6010	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-5

Lab Sample ID: 480-53903-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	8.00		5.00	3.75	ug/L	5		8260C	Total/NA
Methyl tert-butyl ether	12.0		5.00	0.800	ug/L	5		8260C	Total/NA
C5-C8 Aliphatics (unadjusted)	3.59	J	5.00	1.50	ug/L	1		MAVPH	Total/NA
C9-C10 Aromatics	3.58	J	5.00	0.500	ug/L	1		MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	4.21	J	5.00	1.50	ug/L	1		MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	16.6	J B	47.7	9.55	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	16.9	J B	47.7	9.55	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	10.0	J	47.7	9.55	ug/L	1		MA-EPH	Total/NA
Barium	287		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	1.75	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	21.9	J B	50.0	1.50	ug/L	1		6010	Dissolved

Client Sample ID: WCMW-2

Lab Sample ID: 480-53903-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3-Dichlorobenzene	8.32		5.00	3.90	ug/L	5		8260C	Total/NA
Methyl tert-butyl ether	2.57	J	5.00	0.800	ug/L	5		8260C	Total/NA
C5-C8 Aliphatics (unadjusted)	3.91	J	5.00	1.50	ug/L	1		MAVPH	Total/NA
C9-C10 Aromatics	8.04		5.00	0.500	ug/L	1		MAVPH	Total/NA
C9-C12 Aliphatics (unadjusted)	3.43	J	5.00	1.50	ug/L	1		MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	15.9	J B	51.8	10.4	ug/L	1		MA-EPH	Total/NA
Arsenic	7.22	J	10.0	5.55	ug/L	1		6010	Dissolved
Barium	99.4		10.0	0.700	ug/L	1		6010	Dissolved
Cadmium	0.640	J	1.00	0.500	ug/L	1		6010	Dissolved
Nickel	5.72	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	57.7	B	50.0	1.50	ug/L	1		6010	Dissolved
Lead	4.72	J	5.00	3.00	ug/L	1		6010	Dissolved
Antimony	26.2		6.00	6.79	ug/L	1		6010	Dissolved

Client Sample ID: WCMW-4

Lab Sample ID: 480-53903-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	1.72		1.00	0.360	ug/L	1		8260C	Total/NA
Trichloroethene	0.479	J	1.00	0.460	ug/L	1		8260C	Total/NA
C11-C22 Aromatics (unadjusted)	16.6	J B	47.8	9.56	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	12.7	J B	47.8	9.56	ug/L	1		MA-EPH	Total/NA
Barium	53.7		10.0	0.700	ug/L	1		6010	Dissolved
Cadmium	1.97		1.00	0.500	ug/L	1		6010	Dissolved
Nickel	50.2		10.0	1.26	ug/L	1		6010	Dissolved
Zinc	636	B	50.0	1.50	ug/L	1		6010	Dissolved

Client Sample ID: WCMW-1

Lab Sample ID: 480-53903-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	2.32		1.00	0.360	ug/L	1		8260C	Total/NA
Trichloroethene	0.746	J	1.00	0.460	ug/L	1		8260C	Total/NA
C11-C22 Aromatics (unadjusted)	13.9	J B	48.9	9.77	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	27.8	J B	48.9	9.77	ug/L	1		MA-EPH	Total/NA
Barium	58.3		10.0	0.700	ug/L	1		6010	Dissolved
Cadmium	0.940	J	1.00	0.500	ug/L	1		6010	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-1 (Continued)

Lab Sample ID: 480-53903-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	47.7		10.0	1.26	ug/L	1		6010	Dissolved
Zinc	51.4	B	50.0	1.50	ug/L	1		6010	Dissolved

Client Sample ID: WCMW-3

Lab Sample ID: 480-53903-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	3.50		1.00	0.360	ug/L	1		8260C	Total/NA
Trichloroethene	1.03		1.00	0.460	ug/L	1		8260C	Total/NA
C11-C22 Aromatics (unadjusted)	17.6	J B	47.5	9.51	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	18.3	J B	47.5	9.51	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	13.1	J	47.5	9.51	ug/L	1		MA-EPH	Total/NA
Barium	51.7		10.0	0.700	ug/L	1		6010	Dissolved
Cadmium	0.700	J	1.00	0.500	ug/L	1		6010	Dissolved
Nickel	9.46	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	261	B	50.0	1.50	ug/L	1		6010	Dissolved

Client Sample ID: MW-3R

Lab Sample ID: 480-53903-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	7.92		5.00	1.80	ug/L	5		8260C	Total/NA
Trichloroethene	4.08	J	5.00	2.30	ug/L	5		8260C	Total/NA
C5-C8 Aliphatics (unadjusted)	2.17	J	5.00	1.50	ug/L	1		MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	17.2	J B	47.7	9.53	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	22.9	J B	47.7	9.53	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	19.5	J	47.7	9.53	ug/L	1		MA-EPH	Total/NA
Barium	72.0		10.0	0.700	ug/L	1		6010	Dissolved
Cadmium	2.94		1.00	0.500	ug/L	1		6010	Dissolved
Nickel	10.3		10.0	1.26	ug/L	1		6010	Dissolved
Zinc	481	B	50.0	1.50	ug/L	1		6010	Dissolved

Client Sample ID: WCMW-9

Lab Sample ID: 480-53903-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	9.61		5.00	1.80	ug/L	5		8260C	Total/NA
Trichloroethene	3.70	J	5.00	2.30	ug/L	5		8260C	Total/NA
C5-C8 Aliphatics (adjusted)	1.83	J	5.00	1.50	ug/L	1		MA VPH	Total/NA
C5-C8 Aliphatics (unadjusted)	3.33	J	5.00	1.50	ug/L	1		MAVPH	Total/NA
C9-C10 Aromatics	1.74	J	5.00	0.500	ug/L	1		MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	15.2	J B	47.5	9.50	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	22.0	J B	47.5	9.50	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	10.9	J	47.5	9.50	ug/L	1		MA-EPH	Total/NA
Arsenic	8.15	J	10.0	5.55	ug/L	1		6010	Dissolved
Barium	176		10.0	0.700	ug/L	1		6010	Dissolved
Cadmium	1.70		1.00	0.500	ug/L	1		6010	Dissolved
Nickel	24.2		10.0	1.26	ug/L	1		6010	Dissolved
Zinc	666	B	50.0	1.50	ug/L	1		6010	Dissolved

Client Sample ID: TB-01272014

Lab Sample ID: 480-53903-15

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: TB-01272014 (Continued)

Lab Sample ID: 480-53903-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.68	J	50.0	3.00	ug/L	1		8260C	Total/NA

Client Sample ID: WCMW-10

Lab Sample ID: 480-53903-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C11-C22 Aromatics (unadjusted)	10.8	J B	47.4	9.48	ug/L	1		MA-EPH	Total/NA
Barium	153		10.0	0.700	ug/L	1		6010	Dissolved
Nickel	6.17	J	10.0	1.26	ug/L	1		6010	Dissolved
Zinc	16.5	J B	50.0	1.50	ug/L	1		6010	Dissolved

Client Sample ID: WCMW-8

Lab Sample ID: 480-53903-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.96		1.00	0.810	ug/L	1		8260C	Total/NA
Tetrachloroethene	1.97		1.00	0.360	ug/L	1		8260C	Total/NA
Trichloroethene	2.26		1.00	0.460	ug/L	1		8260C	Total/NA
C5-C8 Aliphatics (unadjusted)	2.06	J	5.00	1.50	ug/L	1		MAVPH	Total/NA
C11-C22 Aromatics (unadjusted)	15.4	J B	48.0	9.59	ug/L	1		MA-EPH	Total/NA
C19-C36 Aliphatics	16.4	J B	48.0	9.59	ug/L	1		MA-EPH	Total/NA
C9-C18 Aliphatics	17.3	J	48.0	9.59	ug/L	1		MA-EPH	Total/NA
Barium	179		10.0	0.700	ug/L	1		6010	Dissolved
Cadmium	12.2		1.00	0.500	ug/L	1		6010	Dissolved
Nickel	72.9		10.0	1.26	ug/L	1		6010	Dissolved
Zinc	978	B	50.0	1.50	ug/L	1		6010	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-11

Lab Sample ID: 480-53903-1

Date Collected: 01/27/14 09:01

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.75		5.00	1.75	ug/L			01/30/14 17:38	5
1,1,1-Trichloroethane	<4.10		5.00	4.10	ug/L			01/30/14 17:38	5
1,1,2,2-Tetrachloroethane	<1.05		2.50	1.05	ug/L			01/30/14 17:38	5
1,1,2-Trichloroethane	<1.15		5.00	1.15	ug/L			01/30/14 17:38	5
1,1-Dichloroethane	<1.90		5.00	1.90	ug/L			01/30/14 17:38	5
1,1-Dichloroethene	<1.45		5.00	1.45	ug/L			01/30/14 17:38	5
1,1-Dichloropropene	<3.60		5.00	3.60	ug/L			01/30/14 17:38	5
1,2,3-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 17:38	5
1,2,3-Trichloropropane	<4.45		5.00	4.45	ug/L			01/30/14 17:38	5
1,2,4-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 17:38	5
1,2,4-Trimethylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 17:38	5
1,2-Dibromo-3-Chloropropane	<1.95		25.0	1.95	ug/L			01/30/14 17:38	5
1,2-Dichlorobenzene	<3.95		5.00	3.95	ug/L			01/30/14 17:38	5
1,2-Dichloroethane	<1.05		5.00	1.05	ug/L			01/30/14 17:38	5
1,2-Dichloropropane	<3.60		5.00	3.60	ug/L			01/30/14 17:38	5
1,3,5-Trimethylbenzene	<3.85		5.00	3.85	ug/L			01/30/14 17:38	5
1,3-Dichlorobenzene	<3.90		5.00	3.90	ug/L			01/30/14 17:38	5
1,3-Dichloropropane	<3.75		5.00	3.75	ug/L			01/30/14 17:38	5
1,4-Dichlorobenzene	<4.20		5.00	4.20	ug/L			01/30/14 17:38	5
1,4-Dioxane	<46.6		250	46.6	ug/L			01/30/14 17:38	5
2,2-Dichloropropane	<2.00		5.00	2.00	ug/L			01/30/14 17:38	5
2-Butanone (MEK)	<6.60	*	50.0	6.60	ug/L			01/30/14 17:38	5
2-Chlorotoluene	<4.30		5.00	4.30	ug/L			01/30/14 17:38	5
2-Hexanone	<6.20		50.0	6.20	ug/L			01/30/14 17:38	5
4-Chlorotoluene	<4.20		5.00	4.20	ug/L			01/30/14 17:38	5
4-Isopropyltoluene	<1.55		5.00	1.55	ug/L			01/30/14 17:38	5
4-Methyl-2-pentanone (MIBK)	<10.5		50.0	10.5	ug/L			01/30/14 17:38	5
Acetone	<15.0		250	15.0	ug/L			01/30/14 17:38	5
Benzene	<2.05		5.00	2.05	ug/L			01/30/14 17:38	5
Bromobenzene	<4.00		5.00	4.00	ug/L			01/30/14 17:38	5
Bromoform	<1.30		5.00	1.30	ug/L			01/30/14 17:38	5
Bromomethane	<3.45		10.0	3.45	ug/L			01/30/14 17:38	5
Carbon disulfide	<0.950		50.0	0.950	ug/L			01/30/14 17:38	5
Carbon tetrachloride	<1.35		5.00	1.35	ug/L			01/30/14 17:38	5
Chlorobenzene	<3.75		5.00	3.75	ug/L			01/30/14 17:38	5
Chlorobromomethane	<4.35		5.00	4.35	ug/L			01/30/14 17:38	5
Chlorodibromomethane	<1.60		2.50	1.60	ug/L			01/30/14 17:38	5
Chloroethane	<1.60		10.0	1.60	ug/L			01/30/14 17:38	5
Chloroform	<1.70		5.00	1.70	ug/L			01/30/14 17:38	5
Chloromethane	<1.75		10.0	1.75	ug/L			01/30/14 17:38	5
cis-1,2-Dichloroethene	<4.05		5.00	4.05	ug/L			01/30/14 17:38	5
cis-1,3-Dichloropropene	<1.80		2.00	1.80	ug/L			01/30/14 17:38	5
Dichlorobromomethane	<1.95		2.50	1.95	ug/L			01/30/14 17:38	5
Dichlorodifluoromethane	<3.40		5.00	3.40	ug/L			01/30/14 17:38	5
Ethyl ether	<3.60		5.00	3.60	ug/L			01/30/14 17:38	5
Ethylbenzene	<3.70		5.00	3.70	ug/L			01/30/14 17:38	5
Ethylene Dibromide	<3.65		5.00	3.65	ug/L			01/30/14 17:38	5
Hexachlorobutadiene	<1.40		2.00	1.40	ug/L			01/30/14 17:38	5
Isopropyl ether	<2.95		50.0	2.95	ug/L			01/30/14 17:38	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-11

Lab Sample ID: 480-53903-1

Date Collected: 01/27/14 09:01

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	<3.95		5.00	3.95	ug/L			01/30/14 17:38	5
Methyl tert-butyl ether	<0.800		5.00	0.800	ug/L			01/30/14 17:38	5
Methylene Chloride	<2.20		5.00	2.20	ug/L			01/30/14 17:38	5
m-Xylene & p-Xylene	<3.30		10.0	3.30	ug/L			01/30/14 17:38	5
Naphthalene	<2.15		25.0	2.15	ug/L			01/30/14 17:38	5
n-Butylbenzene	<3.20		5.00	3.20	ug/L			01/30/14 17:38	5
N-Propylbenzene	<3.45		5.00	3.45	ug/L			01/30/14 17:38	5
o-Xylene	<3.80		5.00	3.80	ug/L			01/30/14 17:38	5
sec-Butylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 17:38	5
Styrene	<3.65		5.00	3.65	ug/L			01/30/14 17:38	5
Tert-amyl methyl ether	<1.35		25.0	1.35	ug/L			01/30/14 17:38	5
Tert-butyl ethyl ether	<1.47		25.0	1.47	ug/L			01/30/14 17:38	5
tert-Butylbenzene	<4.05		5.00	4.05	ug/L			01/30/14 17:38	5
Tetrachloroethene	9.11		5.00	1.80	ug/L			01/30/14 17:38	5
Tetrahydrofuran	<6.25 *		50.0	6.25	ug/L			01/30/14 17:38	5
Toluene	<2.55		5.00	2.55	ug/L			01/30/14 17:38	5
trans-1,2-Dichloroethene	<4.50		5.00	4.50	ug/L			01/30/14 17:38	5
trans-1,3-Dichloropropene	<1.85		2.00	1.85	ug/L			01/30/14 17:38	5
Trichloroethene	<2.30		5.00	2.30	ug/L			01/30/14 17:38	5
Trichlorofluoromethane	<4.40		5.00	4.40	ug/L			01/30/14 17:38	5
Vinyl chloride	<4.50		5.00	4.50	ug/L			01/30/14 17:38	5
Dibromomethane	<2.05		5.00	2.05	ug/L			01/30/14 17:38	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		70 - 130		01/30/14 17:38	5
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		01/30/14 17:38	5
4-Bromofluorobenzene (Surr)	97		70 - 130		01/30/14 17:38	5

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	1.79	J	5.00	1.50	ug/L			01/29/14 11:39	1
C9-C10 Aromatics	<5.00		5.00	0.500	ug/L			01/29/14 11:39	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 11:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	88		70 - 130		01/29/14 11:39	1
2,5-Dibromotoluene (pid)	91		70 - 130		01/29/14 11:39	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Acenaphthene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Acenaphthylene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Anthracene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Benzo[a]anthracene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Benzo[a]pyrene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-11

Lab Sample ID: 480-53903-1

Date Collected: 01/27/14 09:01

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Benzo[g,h,i]perylene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Benzo[k]fluoranthene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Chrysene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Dibenz(a,h)anthracene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Fluoranthene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Fluorene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Indeno[1,2,3-cd]pyrene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Naphthalene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Phenanthrene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
Pyrene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 11:24	1
C11-C22 Aromatics (unadjusted)	14.9	J B	47.3	9.47	ug/L		01/30/14 05:48	01/31/14 11:24	1
C19-C36 Aliphatics	<47.3		47.3	9.47	ug/L		01/30/14 05:48	01/31/14 11:24	1
C9-C18 Aliphatics	<47.3		47.3	9.47	ug/L		01/30/14 05:48	01/31/14 11:24	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	26	X	40 - 140	01/30/14 05:48	01/31/14 11:24	1
2-Bromonaphthalene	85		40 - 140	01/30/14 05:48	01/31/14 11:24	1
2-Fluorobiphenyl	93		40 - 140	01/30/14 05:48	01/31/14 11:24	1
o-Terphenyl	50		40 - 140	01/30/14 05:48	01/31/14 11:24	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 19:29	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 19:29	1
Barium	48.4		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 19:29	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 19:29	1
Cadmium	<0.500		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 19:29	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 19:29	1
Nickel	11.4		10.0	1.26	ug/L		01/29/14 10:45	01/30/14 19:29	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 19:29	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 16:49	1
Zinc	374	B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 16:49	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 19:29	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 19:29	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 19:29	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:07	1

Client Sample ID: MW-1R

Lab Sample ID: 480-53903-2

Date Collected: 01/27/14 09:06

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.75		5.00	1.75	ug/L			01/30/14 18:02	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-1R

Lab Sample ID: 480-53903-2

Date Collected: 01/27/14 09:06

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<4.10		5.00	4.10	ug/L			01/30/14 18:02	5
1,1,2,2-Tetrachloroethane	<1.05		2.50	1.05	ug/L			01/30/14 18:02	5
1,1,2-Trichloroethane	<1.15		5.00	1.15	ug/L			01/30/14 18:02	5
1,1-Dichloroethane	<1.90		5.00	1.90	ug/L			01/30/14 18:02	5
1,1-Dichloroethene	<1.45		5.00	1.45	ug/L			01/30/14 18:02	5
1,1-Dichloropropene	<3.60		5.00	3.60	ug/L			01/30/14 18:02	5
1,2,3-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 18:02	5
1,2,3-Trichloropropane	<4.45		5.00	4.45	ug/L			01/30/14 18:02	5
1,2,4-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 18:02	5
1,2,4-Trimethylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 18:02	5
1,2-Dibromo-3-Chloropropane	<1.95		25.0	1.95	ug/L			01/30/14 18:02	5
1,2-Dichlorobenzene	<3.95		5.00	3.95	ug/L			01/30/14 18:02	5
1,2-Dichloroethane	<1.05		5.00	1.05	ug/L			01/30/14 18:02	5
1,2-Dichloropropane	<3.60		5.00	3.60	ug/L			01/30/14 18:02	5
1,3,5-Trimethylbenzene	<3.85		5.00	3.85	ug/L			01/30/14 18:02	5
1,3-Dichlorobenzene	<3.90		5.00	3.90	ug/L			01/30/14 18:02	5
1,3-Dichloropropane	<3.75		5.00	3.75	ug/L			01/30/14 18:02	5
1,4-Dichlorobenzene	<4.20		5.00	4.20	ug/L			01/30/14 18:02	5
1,4-Dioxane	<46.6		250	46.6	ug/L			01/30/14 18:02	5
2,2-Dichloropropane	<2.00		5.00	2.00	ug/L			01/30/14 18:02	5
2-Butanone (MEK)	<6.60	*	50.0	6.60	ug/L			01/30/14 18:02	5
2-Chlorotoluene	<4.30		5.00	4.30	ug/L			01/30/14 18:02	5
2-Hexanone	<6.20		50.0	6.20	ug/L			01/30/14 18:02	5
4-Chlorotoluene	<4.20		5.00	4.20	ug/L			01/30/14 18:02	5
4-Isopropyltoluene	<1.55		5.00	1.55	ug/L			01/30/14 18:02	5
4-Methyl-2-pentanone (MIBK)	<10.5		50.0	10.5	ug/L			01/30/14 18:02	5
Acetone	<15.0		250	15.0	ug/L			01/30/14 18:02	5
Benzene	<2.05		5.00	2.05	ug/L			01/30/14 18:02	5
Bromobenzene	<4.00		5.00	4.00	ug/L			01/30/14 18:02	5
Bromoform	<1.30		5.00	1.30	ug/L			01/30/14 18:02	5
Bromomethane	<3.45		10.0	3.45	ug/L			01/30/14 18:02	5
Carbon disulfide	<0.950		50.0	0.950	ug/L			01/30/14 18:02	5
Carbon tetrachloride	<1.35		5.00	1.35	ug/L			01/30/14 18:02	5
Chlorobenzene	<3.75		5.00	3.75	ug/L			01/30/14 18:02	5
Chlorobromomethane	<4.35		5.00	4.35	ug/L			01/30/14 18:02	5
Chlorodibromomethane	<1.60		2.50	1.60	ug/L			01/30/14 18:02	5
Chloroethane	<1.60		10.0	1.60	ug/L			01/30/14 18:02	5
Chloroform	<1.70		5.00	1.70	ug/L			01/30/14 18:02	5
Chloromethane	<1.75		10.0	1.75	ug/L			01/30/14 18:02	5
cis-1,2-Dichloroethene	<4.05		5.00	4.05	ug/L			01/30/14 18:02	5
cis-1,3-Dichloropropene	<1.80		2.00	1.80	ug/L			01/30/14 18:02	5
Dichlorobromomethane	<1.95		2.50	1.95	ug/L			01/30/14 18:02	5
Dichlorodifluoromethane	<3.40		5.00	3.40	ug/L			01/30/14 18:02	5
Ethyl ether	<3.60		5.00	3.60	ug/L			01/30/14 18:02	5
Ethylbenzene	<3.70		5.00	3.70	ug/L			01/30/14 18:02	5
Ethylene Dibromide	<3.65		5.00	3.65	ug/L			01/30/14 18:02	5
Hexachlorobutadiene	<1.40		2.00	1.40	ug/L			01/30/14 18:02	5
Isopropyl ether	<2.95		50.0	2.95	ug/L			01/30/14 18:02	5
Isopropylbenzene	<3.95		5.00	3.95	ug/L			01/30/14 18:02	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-1R

Lab Sample ID: 480-53903-2

Date Collected: 01/27/14 09:06

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	<0.800		5.00	0.800	ug/L			01/30/14 18:02	5
Methylene Chloride	<2.20		5.00	2.20	ug/L			01/30/14 18:02	5
m-Xylene & p-Xylene	<3.30		10.0	3.30	ug/L			01/30/14 18:02	5
Naphthalene	<2.15		25.0	2.15	ug/L			01/30/14 18:02	5
n-Butylbenzene	<3.20		5.00	3.20	ug/L			01/30/14 18:02	5
N-Propylbenzene	<3.45		5.00	3.45	ug/L			01/30/14 18:02	5
o-Xylene	<3.80		5.00	3.80	ug/L			01/30/14 18:02	5
sec-Butylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 18:02	5
Styrene	<3.65		5.00	3.65	ug/L			01/30/14 18:02	5
Tert-amyl methyl ether	<1.35		25.0	1.35	ug/L			01/30/14 18:02	5
Tert-butyl ethyl ether	<1.47		25.0	1.47	ug/L			01/30/14 18:02	5
tert-Butylbenzene	<4.05		5.00	4.05	ug/L			01/30/14 18:02	5
Tetrachloroethene	<1.80		5.00	1.80	ug/L			01/30/14 18:02	5
Tetrahydrofuran	<6.25 *		50.0	6.25	ug/L			01/30/14 18:02	5
Toluene	<2.55		5.00	2.55	ug/L			01/30/14 18:02	5
trans-1,2-Dichloroethene	<4.50		5.00	4.50	ug/L			01/30/14 18:02	5
trans-1,3-Dichloropropene	<1.85		2.00	1.85	ug/L			01/30/14 18:02	5
Trichloroethene	<2.30		5.00	2.30	ug/L			01/30/14 18:02	5
Trichlorofluoromethane	<4.40		5.00	4.40	ug/L			01/30/14 18:02	5
Vinyl chloride	<4.50		5.00	4.50	ug/L			01/30/14 18:02	5
Dibromomethane	<2.05		5.00	2.05	ug/L			01/30/14 18:02	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130		01/30/14 18:02	5
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		01/30/14 18:02	5
4-Bromofluorobenzene (Surr)	101		70 - 130		01/30/14 18:02	5

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 12:18	1
C9-C10 Aromatics	<5.00		5.00	0.500	ug/L			01/29/14 12:18	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 12:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	92		70 - 130		01/29/14 12:18	1
2,5-Dibromotoluene (pid)	95		70 - 130		01/29/14 12:18	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Acenaphthene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Acenaphthylene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Anthracene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Benzo[a]anthracene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Benzo[a]pyrene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Benzo[b]fluoranthene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-1R

Lab Sample ID: 480-53903-2

Date Collected: 01/27/14 09:06

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Benzo[k]fluoranthene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Chrysene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Dibenz[a,h]anthracene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Fluoranthene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Fluorene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Indeno[1,2,3-cd]pyrene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Naphthalene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Phenanthrene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
Pyrene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 11:53	1
C11-C22 Aromatics (unadjusted)	15.5	J B	47.7	9.55	ug/L		01/30/14 05:48	01/31/14 11:53	1
C19-C36 Aliphatics	<47.7		47.7	9.55	ug/L		01/30/14 05:48	01/31/14 11:53	1
C9-C18 Aliphatics	23.6	J	47.7	9.55	ug/L		01/30/14 05:48	01/31/14 11:53	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	31	X	40 - 140	01/30/14 05:48	01/31/14 11:53	1
2-Bromonaphthalene	46		40 - 140	01/30/14 05:48	01/31/14 11:53	1
2-Fluorobiphenyl	76		40 - 140	01/30/14 05:48	01/31/14 11:53	1
o-Terphenyl	56		40 - 140	01/30/14 05:48	01/31/14 11:53	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 19:41	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 19:41	1
Barium	94.7		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 19:41	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 19:41	1
Cadmium	<0.500		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 19:41	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 19:41	1
Nickel	4.30	J	10.0	1.26	ug/L		01/29/14 10:45	01/30/14 19:41	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 19:41	1
Vanadium	1.92	J	10.0	1.50	ug/L		01/29/14 10:45	01/31/14 16:52	1
Zinc	7.64	J B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 16:52	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 19:41	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 19:41	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 19:41	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:09	1

Client Sample ID: WCMW-7

Lab Sample ID: 480-53903-3

Date Collected: 01/27/14 10:03

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.700		2.00	0.700	ug/L			01/31/14 01:45	2
1,1,1-Trichloroethane	<1.64		2.00	1.64	ug/L			01/31/14 01:45	2

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-7

Lab Sample ID: 480-53903-3

Date Collected: 01/27/14 10:03

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.420		1.00	0.420	ug/L			01/31/14 01:45	2
1,1,2-Trichloroethane	<0.460		2.00	0.460	ug/L			01/31/14 01:45	2
1,1-Dichloroethane	<0.760		2.00	0.760	ug/L			01/31/14 01:45	2
1,1-Dichloroethene	<0.580		2.00	0.580	ug/L			01/31/14 01:45	2
1,1-Dichloropropene	<1.44		2.00	1.44	ug/L			01/31/14 01:45	2
1,2,3-Trichlorobenzene	<0.820		2.00	0.820	ug/L			01/31/14 01:45	2
1,2,3-Trichloropropane	<1.78		2.00	1.78	ug/L			01/31/14 01:45	2
1,2,4-Trichlorobenzene	<0.820		2.00	0.820	ug/L			01/31/14 01:45	2
1,2,4-Trimethylbenzene	<1.50		2.00	1.50	ug/L			01/31/14 01:45	2
1,2-Dibromo-3-Chloropropane	<0.780		10.0	0.780	ug/L			01/31/14 01:45	2
1,2-Dichlorobenzene	<1.58		2.00	1.58	ug/L			01/31/14 01:45	2
1,2-Dichloroethane	<0.420		2.00	0.420	ug/L			01/31/14 01:45	2
1,2-Dichloropropane	<1.44		2.00	1.44	ug/L			01/31/14 01:45	2
1,3,5-Trimethylbenzene	<1.54		2.00	1.54	ug/L			01/31/14 01:45	2
1,3-Dichlorobenzene	<1.56		2.00	1.56	ug/L			01/31/14 01:45	2
1,3-Dichloropropane	<1.50		2.00	1.50	ug/L			01/31/14 01:45	2
1,4-Dichlorobenzene	<1.68		2.00	1.68	ug/L			01/31/14 01:45	2
1,4-Dioxane	<18.6		100	18.6	ug/L			01/31/14 01:45	2
2,2-Dichloropropane	<0.800		2.00	0.800	ug/L			01/31/14 01:45	2
2-Butanone (MEK)	<2.64		20.0	2.64	ug/L			01/31/14 01:45	2
2-Chlorotoluene	<1.72		2.00	1.72	ug/L			01/31/14 01:45	2
2-Hexanone	<2.48		20.0	2.48	ug/L			01/31/14 01:45	2
4-Chlorotoluene	<1.68		2.00	1.68	ug/L			01/31/14 01:45	2
4-Isopropyltoluene	<0.620		2.00	0.620	ug/L			01/31/14 01:45	2
4-Methyl-2-pentanone (MIBK)	<4.20		20.0	4.20	ug/L			01/31/14 01:45	2
Acetone	<6.00		100	6.00	ug/L			01/31/14 01:45	2
Benzene	<0.820		2.00	0.820	ug/L			01/31/14 01:45	2
Bromobenzene	<1.60		2.00	1.60	ug/L			01/31/14 01:45	2
Bromoform	<0.520		2.00	0.520	ug/L			01/31/14 01:45	2
Bromomethane	<1.38		4.00	1.38	ug/L			01/31/14 01:45	2
Carbon disulfide	<0.380		20.0	0.380	ug/L			01/31/14 01:45	2
Carbon tetrachloride	<0.540		2.00	0.540	ug/L			01/31/14 01:45	2
Chlorobenzene	<1.50		2.00	1.50	ug/L			01/31/14 01:45	2
Chlorobromomethane	<1.74		2.00	1.74	ug/L			01/31/14 01:45	2
Chlorodibromomethane	<0.640		1.00	0.640	ug/L			01/31/14 01:45	2
Chloroethane	<0.640		4.00	0.640	ug/L			01/31/14 01:45	2
Chloroform	<0.680		2.00	0.680	ug/L			01/31/14 01:45	2
Chloromethane	<0.700		4.00	0.700	ug/L			01/31/14 01:45	2
cis-1,2-Dichloroethene	109		2.00	1.62	ug/L			01/31/14 01:45	2
cis-1,3-Dichloropropene	<0.720		0.800	0.720	ug/L			01/31/14 01:45	2
Dichlorobromomethane	<0.780		1.00	0.780	ug/L			01/31/14 01:45	2
Dichlorodifluoromethane	<1.36		2.00	1.36	ug/L			01/31/14 01:45	2
Ethyl ether	<1.44		2.00	1.44	ug/L			01/31/14 01:45	2
Ethylbenzene	<1.48		2.00	1.48	ug/L			01/31/14 01:45	2
Ethylene Dibromide	<1.46		2.00	1.46	ug/L			01/31/14 01:45	2
Hexachlorobutadiene	<0.560		0.800	0.560	ug/L			01/31/14 01:45	2
Isopropyl ether	<1.18		20.0	1.18	ug/L			01/31/14 01:45	2
Isopropylbenzene	<1.58		2.00	1.58	ug/L			01/31/14 01:45	2
Methyl tert-butyl ether	2.00		2.00	0.320	ug/L			01/31/14 01:45	2

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-7

Lab Sample ID: 480-53903-3

Date Collected: 01/27/14 10:03

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<0.880		2.00	0.880	ug/L			01/31/14 01:45	2
m-Xylene & p-Xylene	<1.32		4.00	1.32	ug/L			01/31/14 01:45	2
Naphthalene	<0.860		10.0	0.860	ug/L			01/31/14 01:45	2
n-Butylbenzene	<1.28		2.00	1.28	ug/L			01/31/14 01:45	2
N-Propylbenzene	<1.38		2.00	1.38	ug/L			01/31/14 01:45	2
o-Xylene	<1.52		2.00	1.52	ug/L			01/31/14 01:45	2
sec-Butylbenzene	<1.50		2.00	1.50	ug/L			01/31/14 01:45	2
Styrene	<1.46		2.00	1.46	ug/L			01/31/14 01:45	2
Tert-amyl methyl ether	<0.540		10.0	0.540	ug/L			01/31/14 01:45	2
Tert-butyl ethyl ether	<0.588		10.0	0.588	ug/L			01/31/14 01:45	2
tert-Butylbenzene	<1.62		2.00	1.62	ug/L			01/31/14 01:45	2
Tetrachloroethene	<0.720		2.00	0.720	ug/L			01/31/14 01:45	2
Tetrahydrofuran	<2.50	*	20.0	2.50	ug/L			01/31/14 01:45	2
Toluene	<1.02		2.00	1.02	ug/L			01/31/14 01:45	2
trans-1,2-Dichloroethene	<1.80		2.00	1.80	ug/L			01/31/14 01:45	2
trans-1,3-Dichloropropene	<0.740		0.800	0.740	ug/L			01/31/14 01:45	2
Trichloroethene	7.53		2.00	0.920	ug/L			01/31/14 01:45	2
Trichlorofluoromethane	<1.76		2.00	1.76	ug/L			01/31/14 01:45	2
Vinyl chloride	3.66		2.00	1.80	ug/L			01/31/14 01:45	2
Dibromomethane	<0.820		2.00	0.820	ug/L			01/31/14 01:45	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		01/31/14 01:45	2
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		01/31/14 01:45	2
4-Bromofluorobenzene (Surr)	98		70 - 130		01/31/14 01:45	2

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	1.93	J	5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	4.15	J	5.00	1.50	ug/L			01/29/14 12:56	1
C9-C10 Aromatics	<5.00		5.00	0.500	ug/L			01/29/14 12:56	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 12:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	90		70 - 130		01/29/14 12:56	1
2,5-Dibromotoluene (pid)	92		70 - 130		01/29/14 12:56	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Acenaphthene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Acenaphthylene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Anthracene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Benzo[a]anthracene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Benzo[a]pyrene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Benzo[b]fluoranthene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Benzo[g,h,i]perylene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-7

Lab Sample ID: 480-53903-3

Date Collected: 01/27/14 10:03

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Chrysene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Dibenz(a,h)anthracene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Fluoranthene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Fluorene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Indeno[1,2,3-cd]pyrene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Naphthalene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Phenanthrene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
Pyrene	<9.46		9.46	1.89	ug/L		01/30/14 05:48	01/31/14 12:23	1
C11-C22 Aromatics (unadjusted)	15.6	J B	47.3	9.46	ug/L		01/30/14 05:48	01/31/14 12:23	1
C19-C36 Aliphatics	17.4	J B	47.3	9.46	ug/L		01/30/14 05:48	01/31/14 12:23	1
C9-C18 Aliphatics	12.4	J	47.3	9.46	ug/L		01/30/14 05:48	01/31/14 12:23	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	30	X	40 - 140				01/30/14 05:48	01/31/14 12:23	1
2-Bromonaphthalene	74		40 - 140				01/30/14 05:48	01/31/14 12:23	1
2-Fluorobiphenyl	83		40 - 140				01/30/14 05:48	01/31/14 12:23	1
o-Terphenyl	55		40 - 140				01/30/14 05:48	01/31/14 12:23	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 19:43	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 19:43	1
Barium	297		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 19:43	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 19:43	1
Cadmium	<0.500		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 19:43	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 19:43	1
Nickel	4.57	J	10.0	1.26	ug/L		01/29/14 10:45	01/30/14 19:43	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 19:43	1
Vanadium	1.72	J	10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:02	1
Zinc	6.32	J B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:02	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 19:43	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 19:43	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 19:43	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:10	1

Client Sample ID: WCMW-907

Lab Sample ID: 480-53903-4

Date Collected: 01/27/14 10:03

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Acenaphthene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Acenaphthylene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-907

Lab Sample ID: 480-53903-4

Date Collected: 01/27/14 10:03

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Benzo[a]anthracene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Benzo[a]pyrene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Benzo[b]fluoranthene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Benzo[g,h,i]perylene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Benzo[k]fluoranthene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Chrysene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Dibenz(a,h)anthracene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Fluoranthene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Fluorene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Indeno[1,2,3-cd]pyrene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Naphthalene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Phenanthrene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
Pyrene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 12:53	1
C11-C22 Aromatics (unadjusted)	15.2	J B	47.4	9.48	ug/L		01/30/14 05:48	01/31/14 12:53	1
C19-C36 Aliphatics	<47.4		47.4	9.48	ug/L		01/30/14 05:48	01/31/14 12:53	1
C9-C18 Aliphatics	18.4	J	47.4	9.48	ug/L		01/30/14 05:48	01/31/14 12:53	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	27	X	40 - 140	01/30/14 05:48	01/31/14 12:53	1
2-Bromonaphthalene	57		40 - 140	01/30/14 05:48	01/31/14 12:53	1
2-Fluorobiphenyl	85		40 - 140	01/30/14 05:48	01/31/14 12:53	1
o-Terphenyl	50		40 - 140	01/30/14 05:48	01/31/14 12:53	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 19:46	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 19:46	1
Barium	304		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 19:46	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 19:46	1
Cadmium	<0.500		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 19:46	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 19:46	1
Nickel	<1.26		10.0	1.26	ug/L		01/29/14 10:45	01/30/14 19:46	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 19:46	1
Vanadium	1.99	J	10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:04	1
Zinc	5.37	J B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:04	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 19:46	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 19:46	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 19:46	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:12	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-4R

Lab Sample ID: 480-53903-5

Date Collected: 01/27/14 10:06

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.75		5.00	1.75	ug/L			01/30/14 18:50	5
1,1,1-Trichloroethane	<4.10		5.00	4.10	ug/L			01/30/14 18:50	5
1,1,2,2-Tetrachloroethane	<1.05		2.50	1.05	ug/L			01/30/14 18:50	5
1,1,2-Trichloroethane	<1.15		5.00	1.15	ug/L			01/30/14 18:50	5
1,1-Dichloroethane	<1.90		5.00	1.90	ug/L			01/30/14 18:50	5
1,1-Dichloroethene	<1.45		5.00	1.45	ug/L			01/30/14 18:50	5
1,1-Dichloropropene	<3.60		5.00	3.60	ug/L			01/30/14 18:50	5
1,2,3-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 18:50	5
1,2,3-Trichloropropane	<4.45		5.00	4.45	ug/L			01/30/14 18:50	5
1,2,4-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 18:50	5
1,2,4-Trimethylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 18:50	5
1,2-Dibromo-3-Chloropropane	<1.95		25.0	1.95	ug/L			01/30/14 18:50	5
1,2-Dichlorobenzene	<3.95		5.00	3.95	ug/L			01/30/14 18:50	5
1,2-Dichloroethane	<1.05		5.00	1.05	ug/L			01/30/14 18:50	5
1,2-Dichloropropane	<3.60		5.00	3.60	ug/L			01/30/14 18:50	5
1,3,5-Trimethylbenzene	<3.85		5.00	3.85	ug/L			01/30/14 18:50	5
1,3-Dichlorobenzene	<3.90		5.00	3.90	ug/L			01/30/14 18:50	5
1,3-Dichloropropane	<3.75		5.00	3.75	ug/L			01/30/14 18:50	5
1,4-Dichlorobenzene	<4.20		5.00	4.20	ug/L			01/30/14 18:50	5
1,4-Dioxane	<46.6		250	46.6	ug/L			01/30/14 18:50	5
2,2-Dichloropropane	<2.00		5.00	2.00	ug/L			01/30/14 18:50	5
2-Butanone (MEK)	<6.60	*	50.0	6.60	ug/L			01/30/14 18:50	5
2-Chlorotoluene	<4.30		5.00	4.30	ug/L			01/30/14 18:50	5
2-Hexanone	<6.20		50.0	6.20	ug/L			01/30/14 18:50	5
4-Chlorotoluene	<4.20		5.00	4.20	ug/L			01/30/14 18:50	5
4-Isopropyltoluene	<1.55		5.00	1.55	ug/L			01/30/14 18:50	5
4-Methyl-2-pentanone (MIBK)	<10.5		50.0	10.5	ug/L			01/30/14 18:50	5
Acetone	<15.0		250	15.0	ug/L			01/30/14 18:50	5
Benzene	<2.05		5.00	2.05	ug/L			01/30/14 18:50	5
Bromobenzene	<4.00		5.00	4.00	ug/L			01/30/14 18:50	5
Bromoform	<1.30		5.00	1.30	ug/L			01/30/14 18:50	5
Bromomethane	<3.45		10.0	3.45	ug/L			01/30/14 18:50	5
Carbon disulfide	<0.950		50.0	0.950	ug/L			01/30/14 18:50	5
Carbon tetrachloride	<1.35		5.00	1.35	ug/L			01/30/14 18:50	5
Chlorobenzene	<3.75		5.00	3.75	ug/L			01/30/14 18:50	5
Chlorobromomethane	<4.35		5.00	4.35	ug/L			01/30/14 18:50	5
Chlorodibromomethane	<1.60		2.50	1.60	ug/L			01/30/14 18:50	5
Chloroethane	<1.60		10.0	1.60	ug/L			01/30/14 18:50	5
Chloroform	<1.70		5.00	1.70	ug/L			01/30/14 18:50	5
Chloromethane	<1.75		10.0	1.75	ug/L			01/30/14 18:50	5
cis-1,2-Dichloroethene	<4.05		5.00	4.05	ug/L			01/30/14 18:50	5
cis-1,3-Dichloropropene	<1.80		2.00	1.80	ug/L			01/30/14 18:50	5
Dichlorobromomethane	<1.95		2.50	1.95	ug/L			01/30/14 18:50	5
Dichlorodifluoromethane	<3.40		5.00	3.40	ug/L			01/30/14 18:50	5
Ethyl ether	<3.60		5.00	3.60	ug/L			01/30/14 18:50	5
Ethylbenzene	<3.70		5.00	3.70	ug/L			01/30/14 18:50	5
Ethylene Dibromide	<3.65		5.00	3.65	ug/L			01/30/14 18:50	5
Hexachlorobutadiene	<1.40		2.00	1.40	ug/L			01/30/14 18:50	5
Isopropyl ether	<2.95		50.0	2.95	ug/L			01/30/14 18:50	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-4R

Lab Sample ID: 480-53903-5

Date Collected: 01/27/14 10:06

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	<3.95		5.00	3.95	ug/L			01/30/14 18:50	5
Methyl tert-butyl ether	20.4		5.00	0.800	ug/L			01/30/14 18:50	5
Methylene Chloride	<2.20		5.00	2.20	ug/L			01/30/14 18:50	5
m-Xylene & p-Xylene	<3.30		10.0	3.30	ug/L			01/30/14 18:50	5
Naphthalene	44.5		25.0	2.15	ug/L			01/30/14 18:50	5
n-Butylbenzene	<3.20		5.00	3.20	ug/L			01/30/14 18:50	5
N-Propylbenzene	<3.45		5.00	3.45	ug/L			01/30/14 18:50	5
o-Xylene	<3.80		5.00	3.80	ug/L			01/30/14 18:50	5
sec-Butylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 18:50	5
Styrene	<3.65		5.00	3.65	ug/L			01/30/14 18:50	5
Tert-amyl methyl ether	3.00	J	25.0	1.35	ug/L			01/30/14 18:50	5
Tert-butyl ethyl ether	<1.47		25.0	1.47	ug/L			01/30/14 18:50	5
tert-Butylbenzene	<4.05		5.00	4.05	ug/L			01/30/14 18:50	5
Tetrachloroethene	3.79	J	5.00	1.80	ug/L			01/30/14 18:50	5
Tetrahydrofuran	<6.25	*	50.0	6.25	ug/L			01/30/14 18:50	5
Toluene	<2.55		5.00	2.55	ug/L			01/30/14 18:50	5
trans-1,2-Dichloroethene	<4.50		5.00	4.50	ug/L			01/30/14 18:50	5
trans-1,3-Dichloropropene	<1.85		2.00	1.85	ug/L			01/30/14 18:50	5
Trichloroethene	<2.30		5.00	2.30	ug/L			01/30/14 18:50	5
Trichlorofluoromethane	<4.40		5.00	4.40	ug/L			01/30/14 18:50	5
Vinyl chloride	<4.50		5.00	4.50	ug/L			01/30/14 18:50	5
Dibromomethane	<2.05		5.00	2.05	ug/L			01/30/14 18:50	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130		01/30/14 18:50	5
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		01/30/14 18:50	5
4-Bromofluorobenzene (Surr)	99		70 - 130		01/30/14 18:50	5

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<25.0		25.0	7.50	ug/L			01/29/14 13:05	5
C9-C12 Aliphatics (adjusted)	<25.0		25.0	7.50	ug/L			01/29/14 13:05	5

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	9.95	J	25.0	7.50	ug/L			01/29/14 13:51	5
C9-C10 Aromatics	57.4		25.0	2.50	ug/L			01/29/14 13:51	5
C9-C12 Aliphatics (unadjusted)	41.0		25.0	7.50	ug/L			01/29/14 13:51	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	101		70 - 130		01/29/14 13:51	5
2,5-Dibromotoluene (pid)	100		70 - 130		01/29/14 13:51	5

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	4.81	J	9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Acenaphthene	26.6		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Acenaphthylene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Anthracene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Benzo[a]anthracene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Benzo[a]pyrene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-4R

Lab Sample ID: 480-53903-5

Date Collected: 01/27/14 10:06

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Benzo[g,h,i]perylene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Benzo[k]fluoranthene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Chrysene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Dibenz(a,h)anthracene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Fluoranthene	2.12	J	9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Fluorene	22.0		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Indeno[1,2,3-cd]pyrene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Naphthalene	5.76	J	9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Phenanthrene	26.5		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
Pyrene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 13:22	1
C11-C22 Aromatics (unadjusted)	233	B	47.7	9.53	ug/L		01/30/14 05:48	01/31/14 13:22	1
C19-C36 Aliphatics	<47.7		47.7	9.53	ug/L		01/30/14 05:48	01/31/14 13:22	1
C9-C18 Aliphatics	181		47.7	9.53	ug/L		01/30/14 05:48	01/31/14 13:22	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	145		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	29	X	40 - 140	01/30/14 05:48	01/31/14 13:22	1
2-Bromonaphthalene	28	X	40 - 140	01/30/14 05:48	01/31/14 13:22	1
2-Fluorobiphenyl	23	X	40 - 140	01/30/14 05:48	01/31/14 13:22	1
o-Terphenyl	46		40 - 140	01/30/14 05:48	01/31/14 13:22	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 19:49	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 19:49	1
Barium	273		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 19:49	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 19:49	1
Cadmium	<0.500		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 19:49	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 19:49	1
Nickel	4.75	J	10.0	1.26	ug/L		01/29/14 10:45	01/30/14 19:49	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 19:49	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:11	1
Zinc	85.6	B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:11	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 19:49	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 19:49	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 19:49	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:14	1

Client Sample ID: MW-2R

Lab Sample ID: 480-53903-6

Date Collected: 01/27/14 11:26

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.75		5.00	1.75	ug/L			01/30/14 19:14	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-2R

Lab Sample ID: 480-53903-6

Date Collected: 01/27/14 11:26

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<4.10		5.00	4.10	ug/L			01/30/14 19:14	5
1,1,2,2-Tetrachloroethane	<1.05		2.50	1.05	ug/L			01/30/14 19:14	5
1,1,2-Trichloroethane	<1.15		5.00	1.15	ug/L			01/30/14 19:14	5
1,1-Dichloroethane	<1.90		5.00	1.90	ug/L			01/30/14 19:14	5
1,1-Dichloroethene	<1.45		5.00	1.45	ug/L			01/30/14 19:14	5
1,1-Dichloropropene	<3.60		5.00	3.60	ug/L			01/30/14 19:14	5
1,2,3-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 19:14	5
1,2,3-Trichloropropane	<4.45		5.00	4.45	ug/L			01/30/14 19:14	5
1,2,4-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 19:14	5
1,2,4-Trimethylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 19:14	5
1,2-Dibromo-3-Chloropropane	<1.95		25.0	1.95	ug/L			01/30/14 19:14	5
1,2-Dichlorobenzene	<3.95		5.00	3.95	ug/L			01/30/14 19:14	5
1,2-Dichloroethane	<1.05		5.00	1.05	ug/L			01/30/14 19:14	5
1,2-Dichloropropane	<3.60		5.00	3.60	ug/L			01/30/14 19:14	5
1,3,5-Trimethylbenzene	<3.85		5.00	3.85	ug/L			01/30/14 19:14	5
1,3-Dichlorobenzene	<3.90		5.00	3.90	ug/L			01/30/14 19:14	5
1,3-Dichloropropane	<3.75		5.00	3.75	ug/L			01/30/14 19:14	5
1,4-Dichlorobenzene	<4.20		5.00	4.20	ug/L			01/30/14 19:14	5
1,4-Dioxane	<46.6		250	46.6	ug/L			01/30/14 19:14	5
2,2-Dichloropropane	<2.00		5.00	2.00	ug/L			01/30/14 19:14	5
2-Butanone (MEK)	<6.60	*	50.0	6.60	ug/L			01/30/14 19:14	5
2-Chlorotoluene	<4.30		5.00	4.30	ug/L			01/30/14 19:14	5
2-Hexanone	<6.20		50.0	6.20	ug/L			01/30/14 19:14	5
4-Chlorotoluene	<4.20		5.00	4.20	ug/L			01/30/14 19:14	5
4-Isopropyltoluene	<1.55		5.00	1.55	ug/L			01/30/14 19:14	5
4-Methyl-2-pentanone (MIBK)	<10.5		50.0	10.5	ug/L			01/30/14 19:14	5
Acetone	<15.0		250	15.0	ug/L			01/30/14 19:14	5
Benzene	<2.05		5.00	2.05	ug/L			01/30/14 19:14	5
Bromobenzene	<4.00		5.00	4.00	ug/L			01/30/14 19:14	5
Bromoform	<1.30		5.00	1.30	ug/L			01/30/14 19:14	5
Bromomethane	<3.45		10.0	3.45	ug/L			01/30/14 19:14	5
Carbon disulfide	<0.950		50.0	0.950	ug/L			01/30/14 19:14	5
Carbon tetrachloride	<1.35		5.00	1.35	ug/L			01/30/14 19:14	5
Chlorobenzene	<3.75		5.00	3.75	ug/L			01/30/14 19:14	5
Chlorobromomethane	<4.35		5.00	4.35	ug/L			01/30/14 19:14	5
Chlorodibromomethane	<1.60		2.50	1.60	ug/L			01/30/14 19:14	5
Chloroethane	<1.60		10.0	1.60	ug/L			01/30/14 19:14	5
Chloroform	<1.70		5.00	1.70	ug/L			01/30/14 19:14	5
Chloromethane	<1.75		10.0	1.75	ug/L			01/30/14 19:14	5
cis-1,2-Dichloroethene	4.13	J	5.00	4.05	ug/L			01/30/14 19:14	5
cis-1,3-Dichloropropene	<1.80		2.00	1.80	ug/L			01/30/14 19:14	5
Dichlorobromomethane	<1.95		2.50	1.95	ug/L			01/30/14 19:14	5
Dichlorodifluoromethane	<3.40		5.00	3.40	ug/L			01/30/14 19:14	5
Ethyl ether	<3.60		5.00	3.60	ug/L			01/30/14 19:14	5
Ethylbenzene	<3.70		5.00	3.70	ug/L			01/30/14 19:14	5
Ethylene Dibromide	<3.65		5.00	3.65	ug/L			01/30/14 19:14	5
Hexachlorobutadiene	<1.40		2.00	1.40	ug/L			01/30/14 19:14	5
Isopropyl ether	<2.95		50.0	2.95	ug/L			01/30/14 19:14	5
Isopropylbenzene	<3.95		5.00	3.95	ug/L			01/30/14 19:14	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-2R

Lab Sample ID: 480-53903-6

Date Collected: 01/27/14 11:26

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	<0.800		5.00	0.800	ug/L			01/30/14 19:14	5
Methylene Chloride	<2.20		5.00	2.20	ug/L			01/30/14 19:14	5
m-Xylene & p-Xylene	<3.30		10.0	3.30	ug/L			01/30/14 19:14	5
Naphthalene	14.7	J	25.0	2.15	ug/L			01/30/14 19:14	5
n-Butylbenzene	<3.20		5.00	3.20	ug/L			01/30/14 19:14	5
N-Propylbenzene	<3.45		5.00	3.45	ug/L			01/30/14 19:14	5
o-Xylene	<3.80		5.00	3.80	ug/L			01/30/14 19:14	5
sec-Butylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 19:14	5
Styrene	<3.65		5.00	3.65	ug/L			01/30/14 19:14	5
Tert-amyl methyl ether	<1.35		25.0	1.35	ug/L			01/30/14 19:14	5
Tert-butyl ethyl ether	<1.47		25.0	1.47	ug/L			01/30/14 19:14	5
tert-Butylbenzene	<4.05		5.00	4.05	ug/L			01/30/14 19:14	5
Tetrachloroethene	4.40	J	5.00	1.80	ug/L			01/30/14 19:14	5
Tetrahydrofuran	<6.25	*	50.0	6.25	ug/L			01/30/14 19:14	5
Toluene	<2.55		5.00	2.55	ug/L			01/30/14 19:14	5
trans-1,2-Dichloroethene	<4.50		5.00	4.50	ug/L			01/30/14 19:14	5
trans-1,3-Dichloropropene	<1.85		2.00	1.85	ug/L			01/30/14 19:14	5
Trichloroethene	<2.30		5.00	2.30	ug/L			01/30/14 19:14	5
Trichlorofluoromethane	<4.40		5.00	4.40	ug/L			01/30/14 19:14	5
Vinyl chloride	5.19		5.00	4.50	ug/L			01/30/14 19:14	5
Dibromomethane	<2.05		5.00	2.05	ug/L			01/30/14 19:14	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		01/30/14 19:14	5
1,2-Dichloroethane-d4 (Surr)	97		70 - 130		01/30/14 19:14	5
4-Bromofluorobenzene (Surr)	100		70 - 130		01/30/14 19:14	5

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	2.16	J	5.00	1.50	ug/L			01/29/14 14:43	1
C9-C10 Aromatics	3.14	J	5.00	0.500	ug/L			01/29/14 14:43	1
C9-C12 Aliphatics (unadjusted)	2.31	J	5.00	1.50	ug/L			01/29/14 14:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	104		70 - 130		01/29/14 14:43	1
2,5-Dibromotoluene (pid)	103		70 - 130		01/29/14 14:43	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Acenaphthene	3.27	J	9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Acenaphthylene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Anthracene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Benzo[a]anthracene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Benzo[a]pyrene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Benzo[b]fluoranthene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-2R

Lab Sample ID: 480-53903-6

Date Collected: 01/27/14 11:26

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Benzo[k]fluoranthene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Chrysene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Dibenz[a,h]anthracene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Fluoranthene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Fluorene	4.28	J	9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Indeno[1,2,3-cd]pyrene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Naphthalene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Phenanthrene	5.05	J	9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
Pyrene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 14:21	1
C11-C22 Aromatics (unadjusted)	37.1	J B	47.5	9.50	ug/L		01/30/14 05:48	01/31/14 14:21	1
C19-C36 Aliphatics	<47.5		47.5	9.50	ug/L		01/30/14 05:48	01/31/14 14:21	1
C9-C18 Aliphatics	56.9		47.5	9.50	ug/L		01/30/14 05:48	01/31/14 14:21	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	32	X	40 - 140	01/30/14 05:48	01/31/14 14:21	1
2-Bromonaphthalene	21	X	40 - 140	01/30/14 05:48	01/31/14 14:21	1
2-Fluorobiphenyl	48		40 - 140	01/30/14 05:48	01/31/14 14:21	1
o-Terphenyl	46		40 - 140	01/30/14 05:48	01/31/14 14:21	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 20:04	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 20:04	1
Barium	81.0		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 20:04	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 20:04	1
Cadmium	<0.500		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 20:04	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 20:04	1
Nickel	4.55	J	10.0	1.26	ug/L		01/29/14 10:45	01/30/14 20:04	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 20:04	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:23	1
Zinc	66.0	B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:23	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 20:04	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 20:04	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 20:04	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:25	1

Client Sample ID: WCMW-6

Lab Sample ID: 480-53903-7

Date Collected: 01/27/14 11:34

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.75		5.00	1.75	ug/L			01/30/14 19:38	5
1,1,1-Trichloroethane	<4.10		5.00	4.10	ug/L			01/30/14 19:38	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-6

Lab Sample ID: 480-53903-7

Date Collected: 01/27/14 11:34

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<1.05		2.50	1.05	ug/L			01/30/14 19:38	5
1,1,2-Trichloroethane	<1.15		5.00	1.15	ug/L			01/30/14 19:38	5
1,1-Dichloroethane	<1.90		5.00	1.90	ug/L			01/30/14 19:38	5
1,1-Dichloroethene	<1.45		5.00	1.45	ug/L			01/30/14 19:38	5
1,1-Dichloropropene	<3.60		5.00	3.60	ug/L			01/30/14 19:38	5
1,2,3-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 19:38	5
1,2,3-Trichloropropane	<4.45		5.00	4.45	ug/L			01/30/14 19:38	5
1,2,4-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 19:38	5
1,2,4-Trimethylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 19:38	5
1,2-Dibromo-3-Chloropropane	<1.95		25.0	1.95	ug/L			01/30/14 19:38	5
1,2-Dichlorobenzene	<3.95		5.00	3.95	ug/L			01/30/14 19:38	5
1,2-Dichloroethane	<1.05		5.00	1.05	ug/L			01/30/14 19:38	5
1,2-Dichloropropane	<3.60		5.00	3.60	ug/L			01/30/14 19:38	5
1,3,5-Trimethylbenzene	<3.85		5.00	3.85	ug/L			01/30/14 19:38	5
1,3-Dichlorobenzene	<3.90		5.00	3.90	ug/L			01/30/14 19:38	5
1,3-Dichloropropane	<3.75		5.00	3.75	ug/L			01/30/14 19:38	5
1,4-Dichlorobenzene	<4.20		5.00	4.20	ug/L			01/30/14 19:38	5
1,4-Dioxane	<46.6		250	46.6	ug/L			01/30/14 19:38	5
2,2-Dichloropropane	<2.00		5.00	2.00	ug/L			01/30/14 19:38	5
2-Butanone (MEK)	<6.60	*	50.0	6.60	ug/L			01/30/14 19:38	5
2-Chlorotoluene	<4.30		5.00	4.30	ug/L			01/30/14 19:38	5
2-Hexanone	<6.20		50.0	6.20	ug/L			01/30/14 19:38	5
4-Chlorotoluene	<4.20		5.00	4.20	ug/L			01/30/14 19:38	5
4-Isopropyltoluene	<1.55		5.00	1.55	ug/L			01/30/14 19:38	5
4-Methyl-2-pentanone (MIBK)	<10.5		50.0	10.5	ug/L			01/30/14 19:38	5
Acetone	<15.0		250	15.0	ug/L			01/30/14 19:38	5
Benzene	<2.05		5.00	2.05	ug/L			01/30/14 19:38	5
Bromobenzene	<4.00		5.00	4.00	ug/L			01/30/14 19:38	5
Bromoform	<1.30		5.00	1.30	ug/L			01/30/14 19:38	5
Bromomethane	<3.45		10.0	3.45	ug/L			01/30/14 19:38	5
Carbon disulfide	<0.950		50.0	0.950	ug/L			01/30/14 19:38	5
Carbon tetrachloride	<1.35		5.00	1.35	ug/L			01/30/14 19:38	5
Chlorobenzene	<3.75		5.00	3.75	ug/L			01/30/14 19:38	5
Chlorobromomethane	<4.35		5.00	4.35	ug/L			01/30/14 19:38	5
Chlorodibromomethane	<1.60		2.50	1.60	ug/L			01/30/14 19:38	5
Chloroethane	<1.60		10.0	1.60	ug/L			01/30/14 19:38	5
Chloroform	<1.70		5.00	1.70	ug/L			01/30/14 19:38	5
Chloromethane	<1.75		10.0	1.75	ug/L			01/30/14 19:38	5
cis-1,2-Dichloroethene	<4.05		5.00	4.05	ug/L			01/30/14 19:38	5
cis-1,3-Dichloropropene	<1.80		2.00	1.80	ug/L			01/30/14 19:38	5
Dichlorobromomethane	<1.95		2.50	1.95	ug/L			01/30/14 19:38	5
Dichlorodifluoromethane	<3.40		5.00	3.40	ug/L			01/30/14 19:38	5
Ethyl ether	<3.60		5.00	3.60	ug/L			01/30/14 19:38	5
Ethylbenzene	<3.70		5.00	3.70	ug/L			01/30/14 19:38	5
Ethylene Dibromide	<3.65		5.00	3.65	ug/L			01/30/14 19:38	5
Hexachlorobutadiene	<1.40		2.00	1.40	ug/L			01/30/14 19:38	5
Isopropyl ether	<2.95		50.0	2.95	ug/L			01/30/14 19:38	5
Isopropylbenzene	<3.95		5.00	3.95	ug/L			01/30/14 19:38	5
Methyl tert-butyl ether	<0.800		5.00	0.800	ug/L			01/30/14 19:38	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-6

Lab Sample ID: 480-53903-7

Date Collected: 01/27/14 11:34

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	<2.20		5.00	2.20	ug/L			01/30/14 19:38	5
m-Xylene & p-Xylene	<3.30		10.0	3.30	ug/L			01/30/14 19:38	5
Naphthalene	<2.15		25.0	2.15	ug/L			01/30/14 19:38	5
n-Butylbenzene	<3.20		5.00	3.20	ug/L			01/30/14 19:38	5
N-Propylbenzene	<3.45		5.00	3.45	ug/L			01/30/14 19:38	5
o-Xylene	<3.80		5.00	3.80	ug/L			01/30/14 19:38	5
sec-Butylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 19:38	5
Styrene	<3.65		5.00	3.65	ug/L			01/30/14 19:38	5
Tert-amyl methyl ether	<1.35		25.0	1.35	ug/L			01/30/14 19:38	5
Tert-butyl ethyl ether	<1.47		25.0	1.47	ug/L			01/30/14 19:38	5
tert-Butylbenzene	<4.05		5.00	4.05	ug/L			01/30/14 19:38	5
Tetrachloroethene	<1.80		5.00	1.80	ug/L			01/30/14 19:38	5
Tetrahydrofuran	<6.25 *		50.0	6.25	ug/L			01/30/14 19:38	5
Toluene	<2.55		5.00	2.55	ug/L			01/30/14 19:38	5
trans-1,2-Dichloroethene	<4.50		5.00	4.50	ug/L			01/30/14 19:38	5
trans-1,3-Dichloropropene	<1.85		2.00	1.85	ug/L			01/30/14 19:38	5
Trichloroethene	<2.30		5.00	2.30	ug/L			01/30/14 19:38	5
Trichlorofluoromethane	<4.40		5.00	4.40	ug/L			01/30/14 19:38	5
Vinyl chloride	<4.50		5.00	4.50	ug/L			01/30/14 19:38	5
Dibromomethane	<2.05		5.00	2.05	ug/L			01/30/14 19:38	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130		01/30/14 19:38	5
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		01/30/14 19:38	5
4-Bromofluorobenzene (Surr)	98		70 - 130		01/30/14 19:38	5

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	4.23	J	5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	5.99		5.00	1.50	ug/L			01/29/14 15:21	1
C9-C10 Aromatics	0.506	J	5.00	0.500	ug/L			01/29/14 15:21	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 15:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	97		70 - 130		01/29/14 15:21	1
2,5-Dibromotoluene (pid)	98		70 - 130		01/29/14 15:21	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Acenaphthene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Acenaphthylene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Anthracene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Benzo[a]anthracene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Benzo[a]pyrene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Benzo[b]fluoranthene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Benzo[g,h,i]perylene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-6

Lab Sample ID: 480-53903-7

Date Collected: 01/27/14 11:34

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Chrysene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Dibenz(a,h)anthracene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Fluoranthene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Fluorene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Indeno[1,2,3-cd]pyrene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Naphthalene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Phenanthrene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
Pyrene	<9.47		9.47	1.89	ug/L		01/30/14 05:48	01/31/14 14:51	1
C11-C22 Aromatics (unadjusted)	17.9	J B	47.4	9.47	ug/L		01/30/14 05:48	01/31/14 14:51	1
C19-C36 Aliphatics	<47.4		47.4	9.47	ug/L		01/30/14 05:48	01/31/14 14:51	1
C9-C18 Aliphatics	15.5	J	47.4	9.47	ug/L		01/30/14 05:48	01/31/14 14:51	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	34	X	40 - 140				01/30/14 05:48	01/31/14 14:51	1
2-Bromonaphthalene	50		40 - 140				01/30/14 05:48	01/31/14 14:51	1
2-Fluorobiphenyl	77		40 - 140				01/30/14 05:48	01/31/14 14:51	1
o-Terphenyl	49		40 - 140				01/30/14 05:48	01/31/14 14:51	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 20:15	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 20:15	1
Barium	187		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 20:15	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 20:15	1
Cadmium	6.52		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 20:15	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 20:15	1
Nickel	42.1		10.0	1.26	ug/L		01/29/14 10:45	01/30/14 20:15	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 20:15	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:26	1
Zinc	2200	B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:26	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 20:15	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 20:15	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 20:15	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:26	1

Client Sample ID: WCMW-5

Lab Sample ID: 480-53903-8

Date Collected: 01/27/14 12:35

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.75		5.00	1.75	ug/L			01/30/14 20:01	5
1,1,1-Trichloroethane	<4.10		5.00	4.10	ug/L			01/30/14 20:01	5
1,1,2,2-Tetrachloroethane	<1.05		2.50	1.05	ug/L			01/30/14 20:01	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-5

Lab Sample ID: 480-53903-8

Date Collected: 01/27/14 12:35

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	<1.15		5.00	1.15	ug/L			01/30/14 20:01	5
1,1-Dichloroethane	<1.90		5.00	1.90	ug/L			01/30/14 20:01	5
1,1-Dichloroethene	<1.45		5.00	1.45	ug/L			01/30/14 20:01	5
1,1-Dichloropropene	<3.60		5.00	3.60	ug/L			01/30/14 20:01	5
1,2,3-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 20:01	5
1,2,3-Trichloropropane	<4.45		5.00	4.45	ug/L			01/30/14 20:01	5
1,2,4-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 20:01	5
1,2,4-Trimethylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 20:01	5
1,2-Dibromo-3-Chloropropane	<1.95		25.0	1.95	ug/L			01/30/14 20:01	5
1,2-Dichlorobenzene	<3.95		5.00	3.95	ug/L			01/30/14 20:01	5
1,2-Dichloroethane	<1.05		5.00	1.05	ug/L			01/30/14 20:01	5
1,2-Dichloropropane	<3.60		5.00	3.60	ug/L			01/30/14 20:01	5
1,3,5-Trimethylbenzene	<3.85		5.00	3.85	ug/L			01/30/14 20:01	5
1,3-Dichlorobenzene	<3.90		5.00	3.90	ug/L			01/30/14 20:01	5
1,3-Dichloropropane	<3.75		5.00	3.75	ug/L			01/30/14 20:01	5
1,4-Dichlorobenzene	<4.20		5.00	4.20	ug/L			01/30/14 20:01	5
1,4-Dioxane	<46.6		250	46.6	ug/L			01/30/14 20:01	5
2,2-Dichloropropane	<2.00		5.00	2.00	ug/L			01/30/14 20:01	5
2-Butanone (MEK)	<6.60	*	50.0	6.60	ug/L			01/30/14 20:01	5
2-Chlorotoluene	<4.30		5.00	4.30	ug/L			01/30/14 20:01	5
2-Hexanone	<6.20		50.0	6.20	ug/L			01/30/14 20:01	5
4-Chlorotoluene	<4.20		5.00	4.20	ug/L			01/30/14 20:01	5
4-Isopropyltoluene	<1.55		5.00	1.55	ug/L			01/30/14 20:01	5
4-Methyl-2-pentanone (MIBK)	<10.5		50.0	10.5	ug/L			01/30/14 20:01	5
Acetone	<15.0		250	15.0	ug/L			01/30/14 20:01	5
Benzene	<2.05		5.00	2.05	ug/L			01/30/14 20:01	5
Bromobenzene	<4.00		5.00	4.00	ug/L			01/30/14 20:01	5
Bromoform	<1.30		5.00	1.30	ug/L			01/30/14 20:01	5
Bromomethane	<3.45		10.0	3.45	ug/L			01/30/14 20:01	5
Carbon disulfide	<0.950		50.0	0.950	ug/L			01/30/14 20:01	5
Carbon tetrachloride	<1.35		5.00	1.35	ug/L			01/30/14 20:01	5
Chlorobenzene	8.00		5.00	3.75	ug/L			01/30/14 20:01	5
Chlorobromomethane	<4.35		5.00	4.35	ug/L			01/30/14 20:01	5
Chlorodibromomethane	<1.60		2.50	1.60	ug/L			01/30/14 20:01	5
Chloroethane	<1.60		10.0	1.60	ug/L			01/30/14 20:01	5
Chloroform	<1.70		5.00	1.70	ug/L			01/30/14 20:01	5
Chloromethane	<1.75		10.0	1.75	ug/L			01/30/14 20:01	5
cis-1,2-Dichloroethene	<4.05		5.00	4.05	ug/L			01/30/14 20:01	5
cis-1,3-Dichloropropene	<1.80		2.00	1.80	ug/L			01/30/14 20:01	5
Dichlorobromomethane	<1.95		2.50	1.95	ug/L			01/30/14 20:01	5
Dichlorodifluoromethane	<3.40		5.00	3.40	ug/L			01/30/14 20:01	5
Ethyl ether	<3.60		5.00	3.60	ug/L			01/30/14 20:01	5
Ethylbenzene	<3.70		5.00	3.70	ug/L			01/30/14 20:01	5
Ethylene Dibromide	<3.65		5.00	3.65	ug/L			01/30/14 20:01	5
Hexachlorobutadiene	<1.40		2.00	1.40	ug/L			01/30/14 20:01	5
Isopropyl ether	<2.95		50.0	2.95	ug/L			01/30/14 20:01	5
Isopropylbenzene	<3.95		5.00	3.95	ug/L			01/30/14 20:01	5
Methyl tert-butyl ether	12.0		5.00	0.800	ug/L			01/30/14 20:01	5
Methylene Chloride	<2.20		5.00	2.20	ug/L			01/30/14 20:01	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-5

Lab Sample ID: 480-53903-8

Date Collected: 01/27/14 12:35

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<3.30		10.0	3.30	ug/L			01/30/14 20:01	5
Naphthalene	<2.15		25.0	2.15	ug/L			01/30/14 20:01	5
n-Butylbenzene	<3.20		5.00	3.20	ug/L			01/30/14 20:01	5
N-Propylbenzene	<3.45		5.00	3.45	ug/L			01/30/14 20:01	5
o-Xylene	<3.80		5.00	3.80	ug/L			01/30/14 20:01	5
sec-Butylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 20:01	5
Styrene	<3.65		5.00	3.65	ug/L			01/30/14 20:01	5
Tert-amyl methyl ether	<1.35		25.0	1.35	ug/L			01/30/14 20:01	5
Tert-butyl ethyl ether	<1.47		25.0	1.47	ug/L			01/30/14 20:01	5
tert-Butylbenzene	<4.05		5.00	4.05	ug/L			01/30/14 20:01	5
Tetrachloroethene	<1.80		5.00	1.80	ug/L			01/30/14 20:01	5
Tetrahydrofuran	<6.25 *		50.0	6.25	ug/L			01/30/14 20:01	5
Toluene	<2.55		5.00	2.55	ug/L			01/30/14 20:01	5
trans-1,2-Dichloroethene	<4.50		5.00	4.50	ug/L			01/30/14 20:01	5
trans-1,3-Dichloropropene	<1.85		2.00	1.85	ug/L			01/30/14 20:01	5
Trichloroethene	<2.30		5.00	2.30	ug/L			01/30/14 20:01	5
Trichlorofluoromethane	<4.40		5.00	4.40	ug/L			01/30/14 20:01	5
Vinyl chloride	<4.50		5.00	4.50	ug/L			01/30/14 20:01	5
Dibromomethane	<2.05		5.00	2.05	ug/L			01/30/14 20:01	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		01/30/14 20:01	5
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		01/30/14 20:01	5
4-Bromofluorobenzene (Surr)	101		70 - 130		01/30/14 20:01	5

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	3.59	J	5.00	1.50	ug/L			01/29/14 16:00	1
C9-C10 Aromatics	3.58	J	5.00	0.500	ug/L			01/29/14 16:00	1
C9-C12 Aliphatics (unadjusted)	4.21	J	5.00	1.50	ug/L			01/29/14 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	99		70 - 130		01/29/14 16:00	1
2,5-Dibromotoluene (pid)	99		70 - 130		01/29/14 16:00	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Acenaphthene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Acenaphthylene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Anthracene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Benzo[a]anthracene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Benzo[a]pyrene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Benzo[b]fluoranthene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Benzo[g,h,i]perylene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Benzo[k]fluoranthene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-5

Lab Sample ID: 480-53903-8

Date Collected: 01/27/14 12:35

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Dibenz(a,h)anthracene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Fluoranthene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Fluorene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Indeno[1,2,3-cd]pyrene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Naphthalene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Phenanthrene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
Pyrene	<9.55		9.55	1.91	ug/L		01/30/14 05:48	01/31/14 15:20	1
C11-C22 Aromatics (unadjusted)	16.6	J B	47.7	9.55	ug/L		01/30/14 05:48	01/31/14 15:20	1
C19-C36 Aliphatics	16.9	J B	47.7	9.55	ug/L		01/30/14 05:48	01/31/14 15:20	1
C9-C18 Aliphatics	10.0	J	47.7	9.55	ug/L		01/30/14 05:48	01/31/14 15:20	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	37	X	40 - 140				01/30/14 05:48	01/31/14 15:20	1
2-Bromonaphthalene	66		40 - 140				01/30/14 05:48	01/31/14 15:20	1
2-Fluorobiphenyl	79		40 - 140				01/30/14 05:48	01/31/14 15:20	1
o-Terphenyl	55		40 - 140				01/30/14 05:48	01/31/14 15:20	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 20:18	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 20:18	1
Barium	287		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 20:18	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 20:18	1
Cadmium	<0.500		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 20:18	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 20:18	1
Nickel	1.75	J	10.0	1.26	ug/L		01/29/14 10:45	01/30/14 20:18	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 20:18	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:37	1
Zinc	21.9	J B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:37	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 20:18	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 20:18	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 20:18	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:28	1

Client Sample ID: WCMW-2

Lab Sample ID: 480-53903-9

Date Collected: 01/27/14 13:06

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.75		5.00	1.75	ug/L			01/30/14 20:25	5
1,1,1-Trichloroethane	<4.10		5.00	4.10	ug/L			01/30/14 20:25	5
1,1,2,2-Tetrachloroethane	<1.05		2.50	1.05	ug/L			01/30/14 20:25	5
1,1,2-Trichloroethane	<1.15		5.00	1.15	ug/L			01/30/14 20:25	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-2

Lab Sample ID: 480-53903-9

Date Collected: 01/27/14 13:06

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<1.90		5.00	1.90	ug/L			01/30/14 20:25	5
1,1-Dichloroethene	<1.45		5.00	1.45	ug/L			01/30/14 20:25	5
1,1-Dichloropropene	<3.60		5.00	3.60	ug/L			01/30/14 20:25	5
1,2,3-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 20:25	5
1,2,3-Trichloropropane	<4.45		5.00	4.45	ug/L			01/30/14 20:25	5
1,2,4-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/30/14 20:25	5
1,2,4-Trimethylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 20:25	5
1,2-Dibromo-3-Chloropropane	<1.95		25.0	1.95	ug/L			01/30/14 20:25	5
1,2-Dichlorobenzene	<3.95		5.00	3.95	ug/L			01/30/14 20:25	5
1,2-Dichloroethane	<1.05		5.00	1.05	ug/L			01/30/14 20:25	5
1,2-Dichloropropane	<3.60		5.00	3.60	ug/L			01/30/14 20:25	5
1,3,5-Trimethylbenzene	<3.85		5.00	3.85	ug/L			01/30/14 20:25	5
1,3-Dichlorobenzene	8.32		5.00	3.90	ug/L			01/30/14 20:25	5
1,3-Dichloropropane	<3.75		5.00	3.75	ug/L			01/30/14 20:25	5
1,4-Dichlorobenzene	<4.20		5.00	4.20	ug/L			01/30/14 20:25	5
1,4-Dioxane	<46.6		250	46.6	ug/L			01/30/14 20:25	5
2,2-Dichloropropane	<2.00		5.00	2.00	ug/L			01/30/14 20:25	5
2-Butanone (MEK)	<6.60	*	50.0	6.60	ug/L			01/30/14 20:25	5
2-Chlorotoluene	<4.30		5.00	4.30	ug/L			01/30/14 20:25	5
2-Hexanone	<6.20		50.0	6.20	ug/L			01/30/14 20:25	5
4-Chlorotoluene	<4.20		5.00	4.20	ug/L			01/30/14 20:25	5
4-Isopropyltoluene	<1.55		5.00	1.55	ug/L			01/30/14 20:25	5
4-Methyl-2-pentanone (MIBK)	<10.5		50.0	10.5	ug/L			01/30/14 20:25	5
Acetone	<15.0		250	15.0	ug/L			01/30/14 20:25	5
Benzene	<2.05		5.00	2.05	ug/L			01/30/14 20:25	5
Bromobenzene	<4.00		5.00	4.00	ug/L			01/30/14 20:25	5
Bromoform	<1.30		5.00	1.30	ug/L			01/30/14 20:25	5
Bromomethane	<3.45		10.0	3.45	ug/L			01/30/14 20:25	5
Carbon disulfide	<0.950		50.0	0.950	ug/L			01/30/14 20:25	5
Carbon tetrachloride	<1.35		5.00	1.35	ug/L			01/30/14 20:25	5
Chlorobenzene	<3.75		5.00	3.75	ug/L			01/30/14 20:25	5
Chlorobromomethane	<4.35		5.00	4.35	ug/L			01/30/14 20:25	5
Chlorodibromomethane	<1.60		2.50	1.60	ug/L			01/30/14 20:25	5
Chloroethane	<1.60		10.0	1.60	ug/L			01/30/14 20:25	5
Chloroform	<1.70		5.00	1.70	ug/L			01/30/14 20:25	5
Chloromethane	<1.75		10.0	1.75	ug/L			01/30/14 20:25	5
cis-1,2-Dichloroethene	<4.05		5.00	4.05	ug/L			01/30/14 20:25	5
cis-1,3-Dichloropropene	<1.80		2.00	1.80	ug/L			01/30/14 20:25	5
Dichlorobromomethane	<1.95		2.50	1.95	ug/L			01/30/14 20:25	5
Dichlorodifluoromethane	<3.40		5.00	3.40	ug/L			01/30/14 20:25	5
Ethyl ether	<3.60		5.00	3.60	ug/L			01/30/14 20:25	5
Ethylbenzene	<3.70		5.00	3.70	ug/L			01/30/14 20:25	5
Ethylene Dibromide	<3.65		5.00	3.65	ug/L			01/30/14 20:25	5
Hexachlorobutadiene	<1.40		2.00	1.40	ug/L			01/30/14 20:25	5
Isopropyl ether	<2.95		50.0	2.95	ug/L			01/30/14 20:25	5
Isopropylbenzene	<3.95		5.00	3.95	ug/L			01/30/14 20:25	5
Methyl tert-butyl ether	2.57	J	5.00	0.800	ug/L			01/30/14 20:25	5
Methylene Chloride	<2.20		5.00	2.20	ug/L			01/30/14 20:25	5
m-Xylene & p-Xylene	<3.30		10.0	3.30	ug/L			01/30/14 20:25	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-2

Lab Sample ID: 480-53903-9

Date Collected: 01/27/14 13:06

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<2.15		25.0	2.15	ug/L			01/30/14 20:25	5
n-Butylbenzene	<3.20		5.00	3.20	ug/L			01/30/14 20:25	5
N-Propylbenzene	<3.45		5.00	3.45	ug/L			01/30/14 20:25	5
o-Xylene	<3.80		5.00	3.80	ug/L			01/30/14 20:25	5
sec-Butylbenzene	<3.75		5.00	3.75	ug/L			01/30/14 20:25	5
Styrene	<3.65		5.00	3.65	ug/L			01/30/14 20:25	5
Tert-amyl methyl ether	<1.35		25.0	1.35	ug/L			01/30/14 20:25	5
Tert-butyl ethyl ether	<1.47		25.0	1.47	ug/L			01/30/14 20:25	5
tert-Butylbenzene	<4.05		5.00	4.05	ug/L			01/30/14 20:25	5
Tetrachloroethene	<1.80		5.00	1.80	ug/L			01/30/14 20:25	5
Tetrahydrofuran	<6.25	*	50.0	6.25	ug/L			01/30/14 20:25	5
Toluene	<2.55		5.00	2.55	ug/L			01/30/14 20:25	5
trans-1,2-Dichloroethene	<4.50		5.00	4.50	ug/L			01/30/14 20:25	5
trans-1,3-Dichloropropene	<1.85		2.00	1.85	ug/L			01/30/14 20:25	5
Trichloroethene	<2.30		5.00	2.30	ug/L			01/30/14 20:25	5
Trichlorofluoromethane	<4.40		5.00	4.40	ug/L			01/30/14 20:25	5
Vinyl chloride	<4.50		5.00	4.50	ug/L			01/30/14 20:25	5
Dibromomethane	<2.05		5.00	2.05	ug/L			01/30/14 20:25	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		70 - 130		01/30/14 20:25	5
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		01/30/14 20:25	5
4-Bromofluorobenzene (Surr)	98		70 - 130		01/30/14 20:25	5

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	3.91	J	5.00	1.50	ug/L			01/29/14 17:17	1
C9-C10 Aromatics	8.04		5.00	0.500	ug/L			01/29/14 17:17	1
C9-C12 Aliphatics (unadjusted)	3.43	J	5.00	1.50	ug/L			01/29/14 17:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	96		70 - 130		01/29/14 17:17	1
2,5-Dibromotoluene (pid)	97		70 - 130		01/29/14 17:17	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Acenaphthene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Acenaphthylene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Anthracene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Benzo[a]anthracene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Benzo[a]pyrene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Benzo[b]fluoranthene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Benzo[g,h,i]perylene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Benzo[k]fluoranthene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Chrysene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-2

Lab Sample ID: 480-53903-9

Date Collected: 01/27/14 13:06

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Fluoranthene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Fluorene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Indeno[1,2,3-cd]pyrene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Naphthalene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Phenanthrene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
Pyrene	<10.4		10.4	2.07	ug/L		01/30/14 05:48	01/31/14 15:50	1
C11-C22 Aromatics (unadjusted)	15.9	J B	51.8	10.4	ug/L		01/30/14 05:48	01/31/14 15:50	1
C19-C36 Aliphatics	<51.8		51.8	10.4	ug/L		01/30/14 05:48	01/31/14 15:50	1
C9-C18 Aliphatics	<51.8		51.8	10.4	ug/L		01/30/14 05:48	01/31/14 15:50	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	34	X	40 - 140	01/30/14 05:48	01/31/14 15:50	1
2-Bromonaphthalene	79		40 - 140	01/30/14 05:48	01/31/14 15:50	1
2-Fluorobiphenyl	88		40 - 140	01/30/14 05:48	01/31/14 15:50	1
o-Terphenyl	50		40 - 140	01/30/14 05:48	01/31/14 15:50	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 20:21	1
Arsenic	7.22	J	10.0	5.55	ug/L		01/29/14 10:45	01/30/14 20:21	1
Barium	99.4		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 20:21	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 20:21	1
Cadmium	0.640	J	1.00	0.500	ug/L		01/29/14 10:45	01/30/14 20:21	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 20:21	1
Nickel	5.72	J	10.0	1.26	ug/L		01/29/14 10:45	01/30/14 20:21	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 20:21	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:40	1
Zinc	57.7	B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:40	1
Lead	4.72	J	5.00	3.00	ug/L		01/29/14 10:45	01/30/14 20:21	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 20:21	1
Antimony	26.2		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 20:21	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:30	1

Client Sample ID: WCMW-4

Lab Sample ID: 480-53903-10

Date Collected: 01/27/14 13:45

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			01/31/14 02:09	1
1,1,1-Trichloroethane	<0.820		1.00	0.820	ug/L			01/31/14 02:09	1
1,1,2,2-Tetrachloroethane	<0.210		0.500	0.210	ug/L			01/31/14 02:09	1
1,1,2-Trichloroethane	<0.230		1.00	0.230	ug/L			01/31/14 02:09	1
1,1-Dichloroethane	<0.380		1.00	0.380	ug/L			01/31/14 02:09	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-4

Lab Sample ID: 480-53903-10

Date Collected: 01/27/14 13:45

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	<0.290		1.00	0.290	ug/L			01/31/14 02:09	1
1,1-Dichloropropene	<0.720		1.00	0.720	ug/L			01/31/14 02:09	1
1,2,3-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 02:09	1
1,2,3-Trichloropropane	<0.890		1.00	0.890	ug/L			01/31/14 02:09	1
1,2,4-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 02:09	1
1,2,4-Trimethylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 02:09	1
1,2-Dibromo-3-Chloropropane	<0.390		5.00	0.390	ug/L			01/31/14 02:09	1
1,2-Dichlorobenzene	<0.790		1.00	0.790	ug/L			01/31/14 02:09	1
1,2-Dichloroethane	<0.210		1.00	0.210	ug/L			01/31/14 02:09	1
1,2-Dichloropropane	<0.720		1.00	0.720	ug/L			01/31/14 02:09	1
1,3,5-Trimethylbenzene	<0.770		1.00	0.770	ug/L			01/31/14 02:09	1
1,3-Dichlorobenzene	<0.780		1.00	0.780	ug/L			01/31/14 02:09	1
1,3-Dichloropropane	<0.750		1.00	0.750	ug/L			01/31/14 02:09	1
1,4-Dichlorobenzene	<0.840		1.00	0.840	ug/L			01/31/14 02:09	1
1,4-Dioxane	<9.32		50.0	9.32	ug/L			01/31/14 02:09	1
2,2-Dichloropropane	<0.400		1.00	0.400	ug/L			01/31/14 02:09	1
2-Butanone (MEK)	<1.32		10.0	1.32	ug/L			01/31/14 02:09	1
2-Chlorotoluene	<0.860		1.00	0.860	ug/L			01/31/14 02:09	1
2-Hexanone	<1.24		10.0	1.24	ug/L			01/31/14 02:09	1
4-Chlorotoluene	<0.840		1.00	0.840	ug/L			01/31/14 02:09	1
4-Isopropyltoluene	<0.310		1.00	0.310	ug/L			01/31/14 02:09	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			01/31/14 02:09	1
Acetone	<3.00		50.0	3.00	ug/L			01/31/14 02:09	1
Benzene	<0.410		1.00	0.410	ug/L			01/31/14 02:09	1
Bromobenzene	<0.800		1.00	0.800	ug/L			01/31/14 02:09	1
Bromoform	<0.260		1.00	0.260	ug/L			01/31/14 02:09	1
Bromomethane	<0.690		2.00	0.690	ug/L			01/31/14 02:09	1
Carbon disulfide	<0.190		10.0	0.190	ug/L			01/31/14 02:09	1
Carbon tetrachloride	<0.270		1.00	0.270	ug/L			01/31/14 02:09	1
Chlorobenzene	<0.750		1.00	0.750	ug/L			01/31/14 02:09	1
Chlorobromomethane	<0.870		1.00	0.870	ug/L			01/31/14 02:09	1
Chlorodibromomethane	<0.320		0.500	0.320	ug/L			01/31/14 02:09	1
Chloroethane	<0.320		2.00	0.320	ug/L			01/31/14 02:09	1
Chloroform	<0.340		1.00	0.340	ug/L			01/31/14 02:09	1
Chloromethane	<0.350		2.00	0.350	ug/L			01/31/14 02:09	1
cis-1,2-Dichloroethene	<0.810		1.00	0.810	ug/L			01/31/14 02:09	1
cis-1,3-Dichloropropene	<0.360		0.400	0.360	ug/L			01/31/14 02:09	1
Dichlorobromomethane	<0.390		0.500	0.390	ug/L			01/31/14 02:09	1
Dichlorodifluoromethane	<0.680		1.00	0.680	ug/L			01/31/14 02:09	1
Ethyl ether	<0.720		1.00	0.720	ug/L			01/31/14 02:09	1
Ethylbenzene	<0.740		1.00	0.740	ug/L			01/31/14 02:09	1
Ethylene Dibromide	<0.730		1.00	0.730	ug/L			01/31/14 02:09	1
Hexachlorobutadiene	<0.280		0.400	0.280	ug/L			01/31/14 02:09	1
Isopropyl ether	<0.590		10.0	0.590	ug/L			01/31/14 02:09	1
Isopropylbenzene	<0.790		1.00	0.790	ug/L			01/31/14 02:09	1
Methyl tert-butyl ether	<0.160		1.00	0.160	ug/L			01/31/14 02:09	1
Methylene Chloride	<0.440		1.00	0.440	ug/L			01/31/14 02:09	1
m-Xylene & p-Xylene	<0.660		2.00	0.660	ug/L			01/31/14 02:09	1
Naphthalene	<0.430		5.00	0.430	ug/L			01/31/14 02:09	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-4

Lab Sample ID: 480-53903-10

Date Collected: 01/27/14 13:45

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	<0.640		1.00	0.640	ug/L			01/31/14 02:09	1
N-Propylbenzene	<0.690		1.00	0.690	ug/L			01/31/14 02:09	1
o-Xylene	<0.760		1.00	0.760	ug/L			01/31/14 02:09	1
sec-Butylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 02:09	1
Styrene	<0.730		1.00	0.730	ug/L			01/31/14 02:09	1
Tert-amyl methyl ether	<0.270		5.00	0.270	ug/L			01/31/14 02:09	1
Tert-butyl ethyl ether	<0.294		5.00	0.294	ug/L			01/31/14 02:09	1
tert-Butylbenzene	<0.810		1.00	0.810	ug/L			01/31/14 02:09	1
Tetrachloroethene	1.72		1.00	0.360	ug/L			01/31/14 02:09	1
Tetrahydrofuran	<1.25	*	10.0	1.25	ug/L			01/31/14 02:09	1
Toluene	<0.510		1.00	0.510	ug/L			01/31/14 02:09	1
trans-1,2-Dichloroethene	<0.900		1.00	0.900	ug/L			01/31/14 02:09	1
trans-1,3-Dichloropropene	<0.370		0.400	0.370	ug/L			01/31/14 02:09	1
Trichloroethene	0.479	J	1.00	0.460	ug/L			01/31/14 02:09	1
Trichlorofluoromethane	<0.880		1.00	0.880	ug/L			01/31/14 02:09	1
Vinyl chloride	<0.900		1.00	0.900	ug/L			01/31/14 02:09	1
Dibromomethane	<0.410		1.00	0.410	ug/L			01/31/14 02:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130		01/31/14 02:09	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		01/31/14 02:09	1
4-Bromofluorobenzene (Surr)	98		70 - 130		01/31/14 02:09	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 17:56	1
C9-C10 Aromatics	<5.00		5.00	0.500	ug/L			01/29/14 17:56	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 17:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	96		70 - 130		01/29/14 17:56	1
2,5-Dibromotoluene (pid)	98		70 - 130		01/29/14 17:56	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Acenaphthene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Acenaphthylene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Anthracene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Benzo[a]anthracene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Benzo[a]pyrene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Benzo[b]fluoranthene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Benzo[g,h,i]perylene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Benzo[k]fluoranthene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Chrysene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Dibenz(a,h)anthracene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-4

Lab Sample ID: 480-53903-10

Date Collected: 01/27/14 13:45

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Fluorene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Indeno[1,2,3-cd]pyrene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Naphthalene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Phenanthrene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
Pyrene	<9.56		9.56	1.91	ug/L		01/30/14 05:48	01/31/14 16:19	1
C11-C22 Aromatics (unadjusted)	16.6	J B	47.8	9.56	ug/L		01/30/14 05:48	01/31/14 16:19	1
C19-C36 Aliphatics	12.7	J B	47.8	9.56	ug/L		01/30/14 05:48	01/31/14 16:19	1
C9-C18 Aliphatics	<47.8		47.8	9.56	ug/L		01/30/14 05:48	01/31/14 16:19	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	43		40 - 140				01/30/14 05:48	01/31/14 16:19	1
2-Bromonaphthalene	77		40 - 140				01/30/14 05:48	01/31/14 16:19	1
2-Fluorobiphenyl	91		40 - 140				01/30/14 05:48	01/31/14 16:19	1
o-Terphenyl	68		40 - 140				01/30/14 05:48	01/31/14 16:19	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 20:24	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 20:24	1
Barium	53.7		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 20:24	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 20:24	1
Cadmium	1.97		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 20:24	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 20:24	1
Nickel	50.2		10.0	1.26	ug/L		01/29/14 10:45	01/30/14 20:24	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 20:24	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:42	1
Zinc	636	B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:42	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 20:24	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 20:24	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 20:24	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:33	1

Client Sample ID: WCMW-1

Lab Sample ID: 480-53903-11

Date Collected: 01/27/14 14:10

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			01/31/14 02:33	1
1,1,1-Trichloroethane	<0.820		1.00	0.820	ug/L			01/31/14 02:33	1
1,1,2,2-Tetrachloroethane	<0.210		0.500	0.210	ug/L			01/31/14 02:33	1
1,1,2-Trichloroethane	<0.230		1.00	0.230	ug/L			01/31/14 02:33	1
1,1-Dichloroethane	<0.380		1.00	0.380	ug/L			01/31/14 02:33	1
1,1-Dichloroethene	<0.290		1.00	0.290	ug/L			01/31/14 02:33	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-1

Lab Sample ID: 480-53903-11

Date Collected: 01/27/14 14:10

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	<0.720		1.00	0.720	ug/L			01/31/14 02:33	1
1,2,3-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 02:33	1
1,2,3-Trichloropropane	<0.890		1.00	0.890	ug/L			01/31/14 02:33	1
1,2,4-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 02:33	1
1,2,4-Trimethylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 02:33	1
1,2-Dibromo-3-Chloropropane	<0.390		5.00	0.390	ug/L			01/31/14 02:33	1
1,2-Dichlorobenzene	<0.790		1.00	0.790	ug/L			01/31/14 02:33	1
1,2-Dichloroethane	<0.210		1.00	0.210	ug/L			01/31/14 02:33	1
1,2-Dichloropropane	<0.720		1.00	0.720	ug/L			01/31/14 02:33	1
1,3,5-Trimethylbenzene	<0.770		1.00	0.770	ug/L			01/31/14 02:33	1
1,3-Dichlorobenzene	<0.780		1.00	0.780	ug/L			01/31/14 02:33	1
1,3-Dichloropropane	<0.750		1.00	0.750	ug/L			01/31/14 02:33	1
1,4-Dichlorobenzene	<0.840		1.00	0.840	ug/L			01/31/14 02:33	1
1,4-Dioxane	<9.32		50.0	9.32	ug/L			01/31/14 02:33	1
2,2-Dichloropropane	<0.400		1.00	0.400	ug/L			01/31/14 02:33	1
2-Butanone (MEK)	<1.32		10.0	1.32	ug/L			01/31/14 02:33	1
2-Chlorotoluene	<0.860		1.00	0.860	ug/L			01/31/14 02:33	1
2-Hexanone	<1.24		10.0	1.24	ug/L			01/31/14 02:33	1
4-Chlorotoluene	<0.840		1.00	0.840	ug/L			01/31/14 02:33	1
4-Isopropyltoluene	<0.310		1.00	0.310	ug/L			01/31/14 02:33	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			01/31/14 02:33	1
Acetone	<3.00		50.0	3.00	ug/L			01/31/14 02:33	1
Benzene	<0.410		1.00	0.410	ug/L			01/31/14 02:33	1
Bromobenzene	<0.800		1.00	0.800	ug/L			01/31/14 02:33	1
Bromoform	<0.260		1.00	0.260	ug/L			01/31/14 02:33	1
Bromomethane	<0.690		2.00	0.690	ug/L			01/31/14 02:33	1
Carbon disulfide	<0.190		10.0	0.190	ug/L			01/31/14 02:33	1
Carbon tetrachloride	<0.270		1.00	0.270	ug/L			01/31/14 02:33	1
Chlorobenzene	<0.750		1.00	0.750	ug/L			01/31/14 02:33	1
Chlorobromomethane	<0.870		1.00	0.870	ug/L			01/31/14 02:33	1
Chlorodibromomethane	<0.320		0.500	0.320	ug/L			01/31/14 02:33	1
Chloroethane	<0.320		2.00	0.320	ug/L			01/31/14 02:33	1
Chloroform	<0.340		1.00	0.340	ug/L			01/31/14 02:33	1
Chloromethane	<0.350		2.00	0.350	ug/L			01/31/14 02:33	1
cis-1,2-Dichloroethene	<0.810		1.00	0.810	ug/L			01/31/14 02:33	1
cis-1,3-Dichloropropene	<0.360		0.400	0.360	ug/L			01/31/14 02:33	1
Dichlorobromomethane	<0.390		0.500	0.390	ug/L			01/31/14 02:33	1
Dichlorodifluoromethane	<0.680		1.00	0.680	ug/L			01/31/14 02:33	1
Ethyl ether	<0.720		1.00	0.720	ug/L			01/31/14 02:33	1
Ethylbenzene	<0.740		1.00	0.740	ug/L			01/31/14 02:33	1
Ethylene Dibromide	<0.730		1.00	0.730	ug/L			01/31/14 02:33	1
Hexachlorobutadiene	<0.280		0.400	0.280	ug/L			01/31/14 02:33	1
Isopropyl ether	<0.590		10.0	0.590	ug/L			01/31/14 02:33	1
Isopropylbenzene	<0.790		1.00	0.790	ug/L			01/31/14 02:33	1
Methyl tert-butyl ether	<0.160		1.00	0.160	ug/L			01/31/14 02:33	1
Methylene Chloride	<0.440		1.00	0.440	ug/L			01/31/14 02:33	1
m-Xylene & p-Xylene	<0.660		2.00	0.660	ug/L			01/31/14 02:33	1
Naphthalene	<0.430		5.00	0.430	ug/L			01/31/14 02:33	1
n-Butylbenzene	<0.640		1.00	0.640	ug/L			01/31/14 02:33	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-1

Lab Sample ID: 480-53903-11

Date Collected: 01/27/14 14:10

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	<0.690		1.00	0.690	ug/L			01/31/14 02:33	1
o-Xylene	<0.760		1.00	0.760	ug/L			01/31/14 02:33	1
sec-Butylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 02:33	1
Styrene	<0.730		1.00	0.730	ug/L			01/31/14 02:33	1
Tert-amyl methyl ether	<0.270		5.00	0.270	ug/L			01/31/14 02:33	1
Tert-butyl ethyl ether	<0.294		5.00	0.294	ug/L			01/31/14 02:33	1
tert-Butylbenzene	<0.810		1.00	0.810	ug/L			01/31/14 02:33	1
Tetrachloroethene	2.32		1.00	0.360	ug/L			01/31/14 02:33	1
Tetrahydrofuran	<1.25	*	10.0	1.25	ug/L			01/31/14 02:33	1
Toluene	<0.510		1.00	0.510	ug/L			01/31/14 02:33	1
trans-1,2-Dichloroethene	<0.900		1.00	0.900	ug/L			01/31/14 02:33	1
trans-1,3-Dichloropropene	<0.370		0.400	0.370	ug/L			01/31/14 02:33	1
Trichloroethene	0.746	J	1.00	0.460	ug/L			01/31/14 02:33	1
Trichlorofluoromethane	<0.880		1.00	0.880	ug/L			01/31/14 02:33	1
Vinyl chloride	<0.900		1.00	0.900	ug/L			01/31/14 02:33	1
Dibromomethane	<0.410		1.00	0.410	ug/L			01/31/14 02:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130		01/31/14 02:33	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		01/31/14 02:33	1
4-Bromofluorobenzene (Surr)	99		70 - 130		01/31/14 02:33	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 18:34	1
C9-C10 Aromatics	<5.00		5.00	0.500	ug/L			01/29/14 18:34	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	96		70 - 130		01/29/14 18:34	1
2,5-Dibromotoluene (pid)	98		70 - 130		01/29/14 18:34	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Acenaphthene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Acenaphthylene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Anthracene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Benzo[a]anthracene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Benzo[a]pyrene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Benzo[b]fluoranthene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Benzo[g,h,i]perylene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Benzo[k]fluoranthene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Chrysene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Dibenz(a,h)anthracene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Fluoranthene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-1

Lab Sample ID: 480-53903-11

Date Collected: 01/27/14 14:10

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Indeno[1,2,3-cd]pyrene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Naphthalene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Phenanthrene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
Pyrene	<9.77		9.77	1.95	ug/L		01/30/14 05:48	01/31/14 16:49	1
C11-C22 Aromatics (unadjusted)	13.9	J B	48.9	9.77	ug/L		01/30/14 05:48	01/31/14 16:49	1
C19-C36 Aliphatics	27.8	J B	48.9	9.77	ug/L		01/30/14 05:48	01/31/14 16:49	1
C9-C18 Aliphatics	<48.9		48.9	9.77	ug/L		01/30/14 05:48	01/31/14 16:49	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	51		40 - 140				01/30/14 05:48	01/31/14 16:49	1
2-Bromonaphthalene	71		40 - 140				01/30/14 05:48	01/31/14 16:49	1
2-Fluorobiphenyl	81		40 - 140				01/30/14 05:48	01/31/14 16:49	1
o-Terphenyl	68		40 - 140				01/30/14 05:48	01/31/14 16:49	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 20:27	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 20:27	1
Barium	58.3		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 20:27	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 20:27	1
Cadmium	0.940	J	1.00	0.500	ug/L		01/29/14 10:45	01/30/14 20:27	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 20:27	1
Nickel	47.7		10.0	1.26	ug/L		01/29/14 10:45	01/30/14 20:27	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 20:27	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:45	1
Zinc	51.4	B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:45	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 20:27	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 20:27	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 20:27	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:35	1

Client Sample ID: WCMW-3

Lab Sample ID: 480-53903-12

Date Collected: 01/27/14 14:57

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			01/31/14 02:56	1
1,1,1-Trichloroethane	<0.820		1.00	0.820	ug/L			01/31/14 02:56	1
1,1,2,2-Tetrachloroethane	<0.210		0.500	0.210	ug/L			01/31/14 02:56	1
1,1,2-Trichloroethane	<0.230		1.00	0.230	ug/L			01/31/14 02:56	1
1,1-Dichloroethane	<0.380		1.00	0.380	ug/L			01/31/14 02:56	1
1,1-Dichloroethene	<0.290		1.00	0.290	ug/L			01/31/14 02:56	1
1,1-Dichloropropene	<0.720		1.00	0.720	ug/L			01/31/14 02:56	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-3

Lab Sample ID: 480-53903-12

Date Collected: 01/27/14 14:57

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 02:56	1
1,2,3-Trichloropropane	<0.890		1.00	0.890	ug/L			01/31/14 02:56	1
1,2,4-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 02:56	1
1,2,4-Trimethylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 02:56	1
1,2-Dibromo-3-Chloropropane	<0.390		5.00	0.390	ug/L			01/31/14 02:56	1
1,2-Dichlorobenzene	<0.790		1.00	0.790	ug/L			01/31/14 02:56	1
1,2-Dichloroethane	<0.210		1.00	0.210	ug/L			01/31/14 02:56	1
1,2-Dichloropropane	<0.720		1.00	0.720	ug/L			01/31/14 02:56	1
1,3,5-Trimethylbenzene	<0.770		1.00	0.770	ug/L			01/31/14 02:56	1
1,3-Dichlorobenzene	<0.780		1.00	0.780	ug/L			01/31/14 02:56	1
1,3-Dichloropropane	<0.750		1.00	0.750	ug/L			01/31/14 02:56	1
1,4-Dichlorobenzene	<0.840		1.00	0.840	ug/L			01/31/14 02:56	1
1,4-Dioxane	<9.32		50.0	9.32	ug/L			01/31/14 02:56	1
2,2-Dichloropropane	<0.400		1.00	0.400	ug/L			01/31/14 02:56	1
2-Butanone (MEK)	<1.32		10.0	1.32	ug/L			01/31/14 02:56	1
2-Chlorotoluene	<0.860		1.00	0.860	ug/L			01/31/14 02:56	1
2-Hexanone	<1.24		10.0	1.24	ug/L			01/31/14 02:56	1
4-Chlorotoluene	<0.840		1.00	0.840	ug/L			01/31/14 02:56	1
4-Isopropyltoluene	<0.310		1.00	0.310	ug/L			01/31/14 02:56	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			01/31/14 02:56	1
Acetone	<3.00		50.0	3.00	ug/L			01/31/14 02:56	1
Benzene	<0.410		1.00	0.410	ug/L			01/31/14 02:56	1
Bromobenzene	<0.800		1.00	0.800	ug/L			01/31/14 02:56	1
Bromoform	<0.260		1.00	0.260	ug/L			01/31/14 02:56	1
Bromomethane	<0.690		2.00	0.690	ug/L			01/31/14 02:56	1
Carbon disulfide	<0.190		10.0	0.190	ug/L			01/31/14 02:56	1
Carbon tetrachloride	<0.270		1.00	0.270	ug/L			01/31/14 02:56	1
Chlorobenzene	<0.750		1.00	0.750	ug/L			01/31/14 02:56	1
Chlorobromomethane	<0.870		1.00	0.870	ug/L			01/31/14 02:56	1
Chlorodibromomethane	<0.320		0.500	0.320	ug/L			01/31/14 02:56	1
Chloroethane	<0.320		2.00	0.320	ug/L			01/31/14 02:56	1
Chloroform	<0.340		1.00	0.340	ug/L			01/31/14 02:56	1
Chloromethane	<0.350		2.00	0.350	ug/L			01/31/14 02:56	1
cis-1,2-Dichloroethene	<0.810		1.00	0.810	ug/L			01/31/14 02:56	1
cis-1,3-Dichloropropene	<0.360		0.400	0.360	ug/L			01/31/14 02:56	1
Dichlorobromomethane	<0.390		0.500	0.390	ug/L			01/31/14 02:56	1
Dichlorodifluoromethane	<0.680		1.00	0.680	ug/L			01/31/14 02:56	1
Ethyl ether	<0.720		1.00	0.720	ug/L			01/31/14 02:56	1
Ethylbenzene	<0.740		1.00	0.740	ug/L			01/31/14 02:56	1
Ethylene Dibromide	<0.730		1.00	0.730	ug/L			01/31/14 02:56	1
Hexachlorobutadiene	<0.280		0.400	0.280	ug/L			01/31/14 02:56	1
Isopropyl ether	<0.590		10.0	0.590	ug/L			01/31/14 02:56	1
Isopropylbenzene	<0.790		1.00	0.790	ug/L			01/31/14 02:56	1
Methyl tert-butyl ether	<0.160		1.00	0.160	ug/L			01/31/14 02:56	1
Methylene Chloride	<0.440		1.00	0.440	ug/L			01/31/14 02:56	1
m-Xylene & p-Xylene	<0.660		2.00	0.660	ug/L			01/31/14 02:56	1
Naphthalene	<0.430		5.00	0.430	ug/L			01/31/14 02:56	1
n-Butylbenzene	<0.640		1.00	0.640	ug/L			01/31/14 02:56	1
N-Propylbenzene	<0.690		1.00	0.690	ug/L			01/31/14 02:56	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-3

Lab Sample ID: 480-53903-12

Date Collected: 01/27/14 14:57

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.760		1.00	0.760	ug/L			01/31/14 02:56	1
sec-Butylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 02:56	1
Styrene	<0.730		1.00	0.730	ug/L			01/31/14 02:56	1
Tert-amyl methyl ether	<0.270		5.00	0.270	ug/L			01/31/14 02:56	1
Tert-butyl ethyl ether	<0.294		5.00	0.294	ug/L			01/31/14 02:56	1
tert-Butylbenzene	<0.810		1.00	0.810	ug/L			01/31/14 02:56	1
Tetrachloroethene	3.50		1.00	0.360	ug/L			01/31/14 02:56	1
Tetrahydrofuran	<1.25 *		10.0	1.25	ug/L			01/31/14 02:56	1
Toluene	<0.510		1.00	0.510	ug/L			01/31/14 02:56	1
trans-1,2-Dichloroethene	<0.900		1.00	0.900	ug/L			01/31/14 02:56	1
trans-1,3-Dichloropropene	<0.370		0.400	0.370	ug/L			01/31/14 02:56	1
Trichloroethene	1.03		1.00	0.460	ug/L			01/31/14 02:56	1
Trichlorofluoromethane	<0.880		1.00	0.880	ug/L			01/31/14 02:56	1
Vinyl chloride	<0.900		1.00	0.900	ug/L			01/31/14 02:56	1
Dibromomethane	<0.410		1.00	0.410	ug/L			01/31/14 02:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130		01/31/14 02:56	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		01/31/14 02:56	1
4-Bromofluorobenzene (Surr)	99		70 - 130		01/31/14 02:56	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 19:13	1
C9-C10 Aromatics	<5.00		5.00	0.500	ug/L			01/29/14 19:13	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 19:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	96		70 - 130		01/29/14 19:13	1
2,5-Dibromotoluene (pid)	98		70 - 130		01/29/14 19:13	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Acenaphthene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Acenaphthylene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Anthracene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Benzo[a]anthracene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Benzo[a]pyrene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Benzo[b]fluoranthene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Benzo[g,h,i]perylene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Benzo[k]fluoranthene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Chrysene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Dibenz(a,h)anthracene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Fluoranthene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Fluorene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-3

Lab Sample ID: 480-53903-12

Date Collected: 01/27/14 14:57

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Naphthalene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Phenanthrene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
Pyrene	<9.51		9.51	1.90	ug/L		01/30/14 05:48	01/31/14 17:18	1
C11-C22 Aromatics (unadjusted)	17.6	J B	47.5	9.51	ug/L		01/30/14 05:48	01/31/14 17:18	1
C19-C36 Aliphatics	18.3	J B	47.5	9.51	ug/L		01/30/14 05:48	01/31/14 17:18	1
C9-C18 Aliphatics	13.1	J	47.5	9.51	ug/L		01/30/14 05:48	01/31/14 17:18	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	35	X	40 - 140	01/30/14 05:48	01/31/14 17:18	1
2-Bromonaphthalene	61		40 - 140	01/30/14 05:48	01/31/14 17:18	1
2-Fluorobiphenyl	83		40 - 140	01/30/14 05:48	01/31/14 17:18	1
o-Terphenyl	59		40 - 140	01/30/14 05:48	01/31/14 17:18	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 20:30	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 20:30	1
Barium	51.7		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 20:30	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 20:30	1
Cadmium	0.700	J	1.00	0.500	ug/L		01/29/14 10:45	01/30/14 20:30	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 20:30	1
Nickel	9.46	J	10.0	1.26	ug/L		01/29/14 10:45	01/30/14 20:30	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 20:30	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:47	1
Zinc	261	B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:47	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 20:30	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 20:30	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 20:30	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:36	1

Client Sample ID: MW-3R

Lab Sample ID: 480-53903-13

Date Collected: 01/27/14 15:41

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.75		5.00	1.75	ug/L			01/31/14 03:21	5
1,1,1-Trichloroethane	<4.10		5.00	4.10	ug/L			01/31/14 03:21	5
1,1,2,2-Tetrachloroethane	<1.05		2.50	1.05	ug/L			01/31/14 03:21	5
1,1,2-Trichloroethane	<1.15		5.00	1.15	ug/L			01/31/14 03:21	5
1,1-Dichloroethane	<1.90		5.00	1.90	ug/L			01/31/14 03:21	5
1,1-Dichloroethene	<1.45		5.00	1.45	ug/L			01/31/14 03:21	5
1,1-Dichloropropene	<3.60		5.00	3.60	ug/L			01/31/14 03:21	5
1,2,3-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/31/14 03:21	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-3R

Lab Sample ID: 480-53903-13

Date Collected: 01/27/14 15:41

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	<4.45		5.00	4.45	ug/L			01/31/14 03:21	5
1,2,4-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/31/14 03:21	5
1,2,4-Trimethylbenzene	<3.75		5.00	3.75	ug/L			01/31/14 03:21	5
1,2-Dibromo-3-Chloropropane	<1.95		25.0	1.95	ug/L			01/31/14 03:21	5
1,2-Dichlorobenzene	<3.95		5.00	3.95	ug/L			01/31/14 03:21	5
1,2-Dichloroethane	<1.05		5.00	1.05	ug/L			01/31/14 03:21	5
1,2-Dichloropropane	<3.60		5.00	3.60	ug/L			01/31/14 03:21	5
1,3,5-Trimethylbenzene	<3.85		5.00	3.85	ug/L			01/31/14 03:21	5
1,3-Dichlorobenzene	<3.90		5.00	3.90	ug/L			01/31/14 03:21	5
1,3-Dichloropropane	<3.75		5.00	3.75	ug/L			01/31/14 03:21	5
1,4-Dichlorobenzene	<4.20		5.00	4.20	ug/L			01/31/14 03:21	5
1,4-Dioxane	<46.6		250	46.6	ug/L			01/31/14 03:21	5
2,2-Dichloropropane	<2.00		5.00	2.00	ug/L			01/31/14 03:21	5
2-Butanone (MEK)	<6.60		50.0	6.60	ug/L			01/31/14 03:21	5
2-Chlorotoluene	<4.30		5.00	4.30	ug/L			01/31/14 03:21	5
2-Hexanone	<6.20		50.0	6.20	ug/L			01/31/14 03:21	5
4-Chlorotoluene	<4.20		5.00	4.20	ug/L			01/31/14 03:21	5
4-Isopropyltoluene	<1.55		5.00	1.55	ug/L			01/31/14 03:21	5
4-Methyl-2-pentanone (MIBK)	<10.5		50.0	10.5	ug/L			01/31/14 03:21	5
Acetone	<15.0		250	15.0	ug/L			01/31/14 03:21	5
Benzene	<2.05		5.00	2.05	ug/L			01/31/14 03:21	5
Bromobenzene	<4.00		5.00	4.00	ug/L			01/31/14 03:21	5
Bromoform	<1.30		5.00	1.30	ug/L			01/31/14 03:21	5
Bromomethane	<3.45		10.0	3.45	ug/L			01/31/14 03:21	5
Carbon disulfide	<0.950		50.0	0.950	ug/L			01/31/14 03:21	5
Carbon tetrachloride	<1.35		5.00	1.35	ug/L			01/31/14 03:21	5
Chlorobenzene	<3.75		5.00	3.75	ug/L			01/31/14 03:21	5
Chlorobromomethane	<4.35		5.00	4.35	ug/L			01/31/14 03:21	5
Chlorodibromomethane	<1.60		2.50	1.60	ug/L			01/31/14 03:21	5
Chloroethane	<1.60		10.0	1.60	ug/L			01/31/14 03:21	5
Chloroform	<1.70		5.00	1.70	ug/L			01/31/14 03:21	5
Chloromethane	<1.75		10.0	1.75	ug/L			01/31/14 03:21	5
cis-1,2-Dichloroethene	<4.05		5.00	4.05	ug/L			01/31/14 03:21	5
cis-1,3-Dichloropropene	<1.80		2.00	1.80	ug/L			01/31/14 03:21	5
Dichlorobromomethane	<1.95		2.50	1.95	ug/L			01/31/14 03:21	5
Dichlorodifluoromethane	<3.40		5.00	3.40	ug/L			01/31/14 03:21	5
Ethyl ether	<3.60		5.00	3.60	ug/L			01/31/14 03:21	5
Ethylbenzene	<3.70		5.00	3.70	ug/L			01/31/14 03:21	5
Ethylene Dibromide	<3.65		5.00	3.65	ug/L			01/31/14 03:21	5
Hexachlorobutadiene	<1.40		2.00	1.40	ug/L			01/31/14 03:21	5
Isopropyl ether	<2.95		50.0	2.95	ug/L			01/31/14 03:21	5
Isopropylbenzene	<3.95		5.00	3.95	ug/L			01/31/14 03:21	5
Methyl tert-butyl ether	<0.800		5.00	0.800	ug/L			01/31/14 03:21	5
Methylene Chloride	<2.20		5.00	2.20	ug/L			01/31/14 03:21	5
m-Xylene & p-Xylene	<3.30		10.0	3.30	ug/L			01/31/14 03:21	5
Naphthalene	<2.15		25.0	2.15	ug/L			01/31/14 03:21	5
n-Butylbenzene	<3.20		5.00	3.20	ug/L			01/31/14 03:21	5
N-Propylbenzene	<3.45		5.00	3.45	ug/L			01/31/14 03:21	5
o-Xylene	<3.80		5.00	3.80	ug/L			01/31/14 03:21	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-3R

Lab Sample ID: 480-53903-13

Date Collected: 01/27/14 15:41

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	<3.75		5.00	3.75	ug/L			01/31/14 03:21	5
Styrene	<3.65		5.00	3.65	ug/L			01/31/14 03:21	5
Tert-amyl methyl ether	<1.35		25.0	1.35	ug/L			01/31/14 03:21	5
Tert-butyl ethyl ether	<1.47		25.0	1.47	ug/L			01/31/14 03:21	5
tert-Butylbenzene	<4.05		5.00	4.05	ug/L			01/31/14 03:21	5
Tetrachloroethene	7.92		5.00	1.80	ug/L			01/31/14 03:21	5
Tetrahydrofuran	<6.25	*	50.0	6.25	ug/L			01/31/14 03:21	5
Toluene	<2.55		5.00	2.55	ug/L			01/31/14 03:21	5
trans-1,2-Dichloroethene	<4.50		5.00	4.50	ug/L			01/31/14 03:21	5
trans-1,3-Dichloropropene	<1.85		2.00	1.85	ug/L			01/31/14 03:21	5
Trichloroethene	4.08	J	5.00	2.30	ug/L			01/31/14 03:21	5
Trichlorofluoromethane	<4.40		5.00	4.40	ug/L			01/31/14 03:21	5
Vinyl chloride	<4.50		5.00	4.50	ug/L			01/31/14 03:21	5
Dibromomethane	<2.05		5.00	2.05	ug/L			01/31/14 03:21	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		01/31/14 03:21	5
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		01/31/14 03:21	5
4-Bromofluorobenzene (Surr)	102		70 - 130		01/31/14 03:21	5

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	2.17	J	5.00	1.50	ug/L			01/29/14 19:51	1
C9-C10 Aromatics	<5.00		5.00	0.500	ug/L			01/29/14 19:51	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 19:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	93		70 - 130		01/29/14 19:51	1
2,5-Dibromotoluene (pid)	97		70 - 130		01/29/14 19:51	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Acenaphthene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Acenaphthylene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Anthracene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Benzo[a]anthracene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Benzo[a]pyrene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Benzo[b]fluoranthene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Benzo[g,h,i]perylene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Benzo[k]fluoranthene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Chrysene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Dibenz(a,h)anthracene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Fluoranthene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Fluorene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Indeno[1,2,3-cd]pyrene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-3R

Lab Sample ID: 480-53903-13

Date Collected: 01/27/14 15:41

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Phenanthrene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
Pyrene	<9.53		9.53	1.91	ug/L		01/30/14 05:48	01/31/14 17:48	1
C11-C22 Aromatics (unadjusted)	17.2	J B	47.7	9.53	ug/L		01/30/14 05:48	01/31/14 17:48	1
C19-C36 Aliphatics	22.9	J B	47.7	9.53	ug/L		01/30/14 05:48	01/31/14 17:48	1
C9-C18 Aliphatics	19.5	J	47.7	9.53	ug/L		01/30/14 05:48	01/31/14 17:48	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	8	X	40 - 140				01/30/14 05:48	01/31/14 17:48	1
2-Bromonaphthalene	77		40 - 140				01/30/14 05:48	01/31/14 17:48	1
2-Fluorobiphenyl	81		40 - 140				01/30/14 05:48	01/31/14 17:48	1
o-Terphenyl	44		40 - 140				01/30/14 05:48	01/31/14 17:48	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 20:33	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 20:33	1
Barium	72.0		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 20:33	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 20:33	1
Cadmium	2.94		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 20:33	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 20:33	1
Nickel	10.3		10.0	1.26	ug/L		01/29/14 10:45	01/30/14 20:33	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 20:33	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:50	1
Zinc	481	B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:50	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 20:33	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 20:33	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 20:33	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:38	1

Client Sample ID: WCMW-9

Lab Sample ID: 480-53903-14

Date Collected: 01/27/14 15:52

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.75		5.00	1.75	ug/L			01/31/14 03:44	5
1,1,1-Trichloroethane	<4.10		5.00	4.10	ug/L			01/31/14 03:44	5
1,1,2,2-Tetrachloroethane	<1.05		2.50	1.05	ug/L			01/31/14 03:44	5
1,1,2-Trichloroethane	<1.15		5.00	1.15	ug/L			01/31/14 03:44	5
1,1-Dichloroethane	<1.90		5.00	1.90	ug/L			01/31/14 03:44	5
1,1-Dichloroethene	<1.45		5.00	1.45	ug/L			01/31/14 03:44	5
1,1-Dichloropropene	<3.60		5.00	3.60	ug/L			01/31/14 03:44	5
1,2,3-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/31/14 03:44	5
1,2,3-Trichloropropane	<4.45		5.00	4.45	ug/L			01/31/14 03:44	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-9

Lab Sample ID: 480-53903-14

Date Collected: 01/27/14 15:52

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/31/14 03:44	5
1,2,4-Trimethylbenzene	<3.75		5.00	3.75	ug/L			01/31/14 03:44	5
1,2-Dibromo-3-Chloropropane	<1.95		25.0	1.95	ug/L			01/31/14 03:44	5
1,2-Dichlorobenzene	<3.95		5.00	3.95	ug/L			01/31/14 03:44	5
1,2-Dichloroethane	<1.05		5.00	1.05	ug/L			01/31/14 03:44	5
1,2-Dichloropropane	<3.60		5.00	3.60	ug/L			01/31/14 03:44	5
1,3,5-Trimethylbenzene	<3.85		5.00	3.85	ug/L			01/31/14 03:44	5
1,3-Dichlorobenzene	<3.90		5.00	3.90	ug/L			01/31/14 03:44	5
1,3-Dichloropropane	<3.75		5.00	3.75	ug/L			01/31/14 03:44	5
1,4-Dichlorobenzene	<4.20		5.00	4.20	ug/L			01/31/14 03:44	5
1,4-Dioxane	<46.6		250	46.6	ug/L			01/31/14 03:44	5
2,2-Dichloropropane	<2.00		5.00	2.00	ug/L			01/31/14 03:44	5
2-Butanone (MEK)	<6.60		50.0	6.60	ug/L			01/31/14 03:44	5
2-Chlorotoluene	<4.30		5.00	4.30	ug/L			01/31/14 03:44	5
2-Hexanone	<6.20		50.0	6.20	ug/L			01/31/14 03:44	5
4-Chlorotoluene	<4.20		5.00	4.20	ug/L			01/31/14 03:44	5
4-Isopropyltoluene	<1.55		5.00	1.55	ug/L			01/31/14 03:44	5
4-Methyl-2-pentanone (MIBK)	<10.5		50.0	10.5	ug/L			01/31/14 03:44	5
Acetone	<15.0		250	15.0	ug/L			01/31/14 03:44	5
Benzene	<2.05		5.00	2.05	ug/L			01/31/14 03:44	5
Bromobenzene	<4.00		5.00	4.00	ug/L			01/31/14 03:44	5
Bromoform	<1.30		5.00	1.30	ug/L			01/31/14 03:44	5
Bromomethane	<3.45		10.0	3.45	ug/L			01/31/14 03:44	5
Carbon disulfide	<0.950		50.0	0.950	ug/L			01/31/14 03:44	5
Carbon tetrachloride	<1.35		5.00	1.35	ug/L			01/31/14 03:44	5
Chlorobenzene	<3.75		5.00	3.75	ug/L			01/31/14 03:44	5
Chlorobromomethane	<4.35		5.00	4.35	ug/L			01/31/14 03:44	5
Chlorodibromomethane	<1.60		2.50	1.60	ug/L			01/31/14 03:44	5
Chloroethane	<1.60		10.0	1.60	ug/L			01/31/14 03:44	5
Chloroform	<1.70		5.00	1.70	ug/L			01/31/14 03:44	5
Chloromethane	<1.75		10.0	1.75	ug/L			01/31/14 03:44	5
cis-1,2-Dichloroethene	<4.05		5.00	4.05	ug/L			01/31/14 03:44	5
cis-1,3-Dichloropropene	<1.80		2.00	1.80	ug/L			01/31/14 03:44	5
Dichlorobromomethane	<1.95		2.50	1.95	ug/L			01/31/14 03:44	5
Dichlorodifluoromethane	<3.40		5.00	3.40	ug/L			01/31/14 03:44	5
Ethyl ether	<3.60		5.00	3.60	ug/L			01/31/14 03:44	5
Ethylbenzene	<3.70		5.00	3.70	ug/L			01/31/14 03:44	5
Ethylene Dibromide	<3.65		5.00	3.65	ug/L			01/31/14 03:44	5
Hexachlorobutadiene	<1.40		2.00	1.40	ug/L			01/31/14 03:44	5
Isopropyl ether	<2.95		50.0	2.95	ug/L			01/31/14 03:44	5
Isopropylbenzene	<3.95		5.00	3.95	ug/L			01/31/14 03:44	5
Methyl tert-butyl ether	<0.800		5.00	0.800	ug/L			01/31/14 03:44	5
Methylene Chloride	<2.20		5.00	2.20	ug/L			01/31/14 03:44	5
m-Xylene & p-Xylene	<3.30		10.0	3.30	ug/L			01/31/14 03:44	5
Naphthalene	<2.15		25.0	2.15	ug/L			01/31/14 03:44	5
n-Butylbenzene	<3.20		5.00	3.20	ug/L			01/31/14 03:44	5
N-Propylbenzene	<3.45		5.00	3.45	ug/L			01/31/14 03:44	5
o-Xylene	<3.80		5.00	3.80	ug/L			01/31/14 03:44	5
sec-Butylbenzene	<3.75		5.00	3.75	ug/L			01/31/14 03:44	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-9

Lab Sample ID: 480-53903-14

Date Collected: 01/27/14 15:52

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	<3.65		5.00	3.65	ug/L			01/31/14 03:44	5
Tert-amyl methyl ether	<1.35		25.0	1.35	ug/L			01/31/14 03:44	5
Tert-butyl ethyl ether	<1.47		25.0	1.47	ug/L			01/31/14 03:44	5
tert-Butylbenzene	<4.05		5.00	4.05	ug/L			01/31/14 03:44	5
Tetrachloroethene	9.61		5.00	1.80	ug/L			01/31/14 03:44	5
Tetrahydrofuran	<6.25	*	50.0	6.25	ug/L			01/31/14 03:44	5
Toluene	<2.55		5.00	2.55	ug/L			01/31/14 03:44	5
trans-1,2-Dichloroethene	<4.50		5.00	4.50	ug/L			01/31/14 03:44	5
trans-1,3-Dichloropropene	<1.85		2.00	1.85	ug/L			01/31/14 03:44	5
Trichloroethene	3.70	J	5.00	2.30	ug/L			01/31/14 03:44	5
Trichlorofluoromethane	<4.40		5.00	4.40	ug/L			01/31/14 03:44	5
Vinyl chloride	<4.50		5.00	4.50	ug/L			01/31/14 03:44	5
Dibromomethane	<2.05		5.00	2.05	ug/L			01/31/14 03:44	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130		01/31/14 03:44	5
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		01/31/14 03:44	5
4-Bromofluorobenzene (Surr)	97		70 - 130		01/31/14 03:44	5

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	1.83	J	5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	3.33	J	5.00	1.50	ug/L			01/29/14 20:30	1
C9-C10 Aromatics	1.74	J	5.00	0.500	ug/L			01/29/14 20:30	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 20:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	98		70 - 130		01/29/14 20:30	1
2,5-Dibromotoluene (pid)	101		70 - 130		01/29/14 20:30	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Acenaphthene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Acenaphthylene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Anthracene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Benzo[a]anthracene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Benzo[a]pyrene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Benzo[b]fluoranthene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Benzo[g,h,i]perylene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Benzo[k]fluoranthene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Chrysene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Dibenz(a,h)anthracene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Fluoranthene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Fluorene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Indeno[1,2,3-cd]pyrene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Naphthalene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-9

Lab Sample ID: 480-53903-14

Date Collected: 01/27/14 15:52

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
Pyrene	<9.50		9.50	1.90	ug/L		01/30/14 05:48	01/31/14 18:47	1
C11-C22 Aromatics (unadjusted)	15.2	J B	47.5	9.50	ug/L		01/30/14 05:48	01/31/14 18:47	1
C19-C36 Aliphatics	22.0	J B	47.5	9.50	ug/L		01/30/14 05:48	01/31/14 18:47	1
C9-C18 Aliphatics	10.9	J	47.5	9.50	ug/L		01/30/14 05:48	01/31/14 18:47	1
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	31	X	40 - 140				01/30/14 05:48	01/31/14 18:47	1
2-Bromonaphthalene	77		40 - 140				01/30/14 05:48	01/31/14 18:47	1
2-Fluorobiphenyl	91		40 - 140				01/30/14 05:48	01/31/14 18:47	1
o-Terphenyl	50		40 - 140				01/30/14 05:48	01/31/14 18:47	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 20:35	1
Arsenic	8.15	J	10.0	5.55	ug/L		01/29/14 10:45	01/30/14 20:35	1
Barium	176		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 20:35	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 20:35	1
Cadmium	1.70		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 20:35	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 20:35	1
Nickel	24.2		10.0	1.26	ug/L		01/29/14 10:45	01/30/14 20:35	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 20:35	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:53	1
Zinc	666	B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:53	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 20:35	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 20:35	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 20:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:40	1

Client Sample ID: TB-01272014

Lab Sample ID: 480-53903-15

Date Collected: 01/27/14 12:00

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			01/31/14 04:08	1
1,1,1-Trichloroethane	<0.820		1.00	0.820	ug/L			01/31/14 04:08	1
1,1,2,2-Tetrachloroethane	<0.210		0.500	0.210	ug/L			01/31/14 04:08	1
1,1,2-Trichloroethane	<0.230		1.00	0.230	ug/L			01/31/14 04:08	1
1,1-Dichloroethane	<0.380		1.00	0.380	ug/L			01/31/14 04:08	1
1,1-Dichloroethene	<0.290		1.00	0.290	ug/L			01/31/14 04:08	1
1,1-Dichloropropene	<0.720		1.00	0.720	ug/L			01/31/14 04:08	1
1,2,3-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 04:08	1
1,2,3-Trichloropropane	<0.890		1.00	0.890	ug/L			01/31/14 04:08	1
1,2,4-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 04:08	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: TB-01272014

Lab Sample ID: 480-53903-15

Date Collected: 01/27/14 12:00

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 04:08	1
1,2-Dibromo-3-Chloropropane	<0.390		5.00	0.390	ug/L			01/31/14 04:08	1
1,2-Dichlorobenzene	<0.790		1.00	0.790	ug/L			01/31/14 04:08	1
1,2-Dichloroethane	<0.210		1.00	0.210	ug/L			01/31/14 04:08	1
1,2-Dichloropropane	<0.720		1.00	0.720	ug/L			01/31/14 04:08	1
1,3,5-Trimethylbenzene	<0.770		1.00	0.770	ug/L			01/31/14 04:08	1
1,3-Dichlorobenzene	<0.780		1.00	0.780	ug/L			01/31/14 04:08	1
1,3-Dichloropropane	<0.750		1.00	0.750	ug/L			01/31/14 04:08	1
1,4-Dichlorobenzene	<0.840		1.00	0.840	ug/L			01/31/14 04:08	1
1,4-Dioxane	<9.32		50.0	9.32	ug/L			01/31/14 04:08	1
2,2-Dichloropropane	<0.400		1.00	0.400	ug/L			01/31/14 04:08	1
2-Butanone (MEK)	<1.32		10.0	1.32	ug/L			01/31/14 04:08	1
2-Chlorotoluene	<0.860		1.00	0.860	ug/L			01/31/14 04:08	1
2-Hexanone	<1.24		10.0	1.24	ug/L			01/31/14 04:08	1
4-Chlorotoluene	<0.840		1.00	0.840	ug/L			01/31/14 04:08	1
4-Isopropyltoluene	<0.310		1.00	0.310	ug/L			01/31/14 04:08	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			01/31/14 04:08	1
Acetone	4.68 J		50.0	3.00	ug/L			01/31/14 04:08	1
Benzene	<0.410		1.00	0.410	ug/L			01/31/14 04:08	1
Bromobenzene	<0.800		1.00	0.800	ug/L			01/31/14 04:08	1
Bromoform	<0.260		1.00	0.260	ug/L			01/31/14 04:08	1
Bromomethane	<0.690		2.00	0.690	ug/L			01/31/14 04:08	1
Carbon disulfide	<0.190		10.0	0.190	ug/L			01/31/14 04:08	1
Carbon tetrachloride	<0.270		1.00	0.270	ug/L			01/31/14 04:08	1
Chlorobenzene	<0.750		1.00	0.750	ug/L			01/31/14 04:08	1
Chlorobromomethane	<0.870		1.00	0.870	ug/L			01/31/14 04:08	1
Chlorodibromomethane	<0.320		0.500	0.320	ug/L			01/31/14 04:08	1
Chloroethane	<0.320		2.00	0.320	ug/L			01/31/14 04:08	1
Chloroform	<0.340		1.00	0.340	ug/L			01/31/14 04:08	1
Chloromethane	<0.350		2.00	0.350	ug/L			01/31/14 04:08	1
cis-1,2-Dichloroethene	<0.810		1.00	0.810	ug/L			01/31/14 04:08	1
cis-1,3-Dichloropropene	<0.360		0.400	0.360	ug/L			01/31/14 04:08	1
Dichlorobromomethane	<0.390		0.500	0.390	ug/L			01/31/14 04:08	1
Dichlorodifluoromethane	<0.680		1.00	0.680	ug/L			01/31/14 04:08	1
Ethyl ether	<0.720		1.00	0.720	ug/L			01/31/14 04:08	1
Ethylbenzene	<0.740		1.00	0.740	ug/L			01/31/14 04:08	1
Ethylene Dibromide	<0.730		1.00	0.730	ug/L			01/31/14 04:08	1
Hexachlorobutadiene	<0.280		0.400	0.280	ug/L			01/31/14 04:08	1
Isopropyl ether	<0.590		10.0	0.590	ug/L			01/31/14 04:08	1
Isopropylbenzene	<0.790		1.00	0.790	ug/L			01/31/14 04:08	1
Methyl tert-butyl ether	<0.160		1.00	0.160	ug/L			01/31/14 04:08	1
Methylene Chloride	<0.440		1.00	0.440	ug/L			01/31/14 04:08	1
m-Xylene & p-Xylene	<0.660		2.00	0.660	ug/L			01/31/14 04:08	1
Naphthalene	<0.430		5.00	0.430	ug/L			01/31/14 04:08	1
n-Butylbenzene	<0.640		1.00	0.640	ug/L			01/31/14 04:08	1
N-Propylbenzene	<0.690		1.00	0.690	ug/L			01/31/14 04:08	1
o-Xylene	<0.760		1.00	0.760	ug/L			01/31/14 04:08	1
sec-Butylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 04:08	1
Styrene	<0.730		1.00	0.730	ug/L			01/31/14 04:08	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: TB-01272014

Lab Sample ID: 480-53903-15

Date Collected: 01/27/14 12:00

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tert-amyl methyl ether	<0.270		5.00	0.270	ug/L			01/31/14 04:08	1
Tert-butyl ethyl ether	<0.294		5.00	0.294	ug/L			01/31/14 04:08	1
tert-Butylbenzene	<0.810		1.00	0.810	ug/L			01/31/14 04:08	1
Tetrachloroethene	<0.360		1.00	0.360	ug/L			01/31/14 04:08	1
Tetrahydrofuran	<1.25	*	10.0	1.25	ug/L			01/31/14 04:08	1
Toluene	<0.510		1.00	0.510	ug/L			01/31/14 04:08	1
trans-1,2-Dichloroethene	<0.900		1.00	0.900	ug/L			01/31/14 04:08	1
trans-1,3-Dichloropropene	<0.370		0.400	0.370	ug/L			01/31/14 04:08	1
Trichloroethene	<0.460		1.00	0.460	ug/L			01/31/14 04:08	1
Trichlorofluoromethane	<0.880		1.00	0.880	ug/L			01/31/14 04:08	1
Vinyl chloride	<0.900		1.00	0.900	ug/L			01/31/14 04:08	1
Dibromomethane	<0.410		1.00	0.410	ug/L			01/31/14 04:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		70 - 130		01/31/14 04:08	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		01/31/14 04:08	1
4-Bromofluorobenzene (Surr)	98		70 - 130		01/31/14 04:08	1

Client Sample ID: WCMW-10

Lab Sample ID: 480-53903-16

Date Collected: 01/28/14 09:36

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<1.75		5.00	1.75	ug/L			01/31/14 04:32	5
1,1,1-Trichloroethane	<4.10		5.00	4.10	ug/L			01/31/14 04:32	5
1,1,2,2-Tetrachloroethane	<1.05		2.50	1.05	ug/L			01/31/14 04:32	5
1,1,2-Trichloroethane	<1.15		5.00	1.15	ug/L			01/31/14 04:32	5
1,1-Dichloroethane	<1.90		5.00	1.90	ug/L			01/31/14 04:32	5
1,1-Dichloroethene	<1.45		5.00	1.45	ug/L			01/31/14 04:32	5
1,1-Dichloropropene	<3.60		5.00	3.60	ug/L			01/31/14 04:32	5
1,2,3-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/31/14 04:32	5
1,2,3-Trichloropropane	<4.45		5.00	4.45	ug/L			01/31/14 04:32	5
1,2,4-Trichlorobenzene	<2.05		5.00	2.05	ug/L			01/31/14 04:32	5
1,2,4-Trimethylbenzene	<3.75		5.00	3.75	ug/L			01/31/14 04:32	5
1,2-Dibromo-3-Chloropropane	<1.95		25.0	1.95	ug/L			01/31/14 04:32	5
1,2-Dichlorobenzene	<3.95		5.00	3.95	ug/L			01/31/14 04:32	5
1,2-Dichloroethane	<1.05		5.00	1.05	ug/L			01/31/14 04:32	5
1,2-Dichloropropane	<3.60		5.00	3.60	ug/L			01/31/14 04:32	5
1,3,5-Trimethylbenzene	<3.85		5.00	3.85	ug/L			01/31/14 04:32	5
1,3-Dichlorobenzene	<3.90		5.00	3.90	ug/L			01/31/14 04:32	5
1,3-Dichloropropane	<3.75		5.00	3.75	ug/L			01/31/14 04:32	5
1,4-Dichlorobenzene	<4.20		5.00	4.20	ug/L			01/31/14 04:32	5
1,4-Dioxane	<46.6		250	46.6	ug/L			01/31/14 04:32	5
2,2-Dichloropropane	<2.00		5.00	2.00	ug/L			01/31/14 04:32	5
2-Butanone (MEK)	<6.60		50.0	6.60	ug/L			01/31/14 04:32	5
2-Chlorotoluene	<4.30		5.00	4.30	ug/L			01/31/14 04:32	5
2-Hexanone	<6.20		50.0	6.20	ug/L			01/31/14 04:32	5
4-Chlorotoluene	<4.20		5.00	4.20	ug/L			01/31/14 04:32	5
4-Isopropyltoluene	<1.55		5.00	1.55	ug/L			01/31/14 04:32	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-10

Lab Sample ID: 480-53903-16

Date Collected: 01/28/14 09:36

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	<10.5		50.0	10.5	ug/L			01/31/14 04:32	5
Acetone	<15.0		250	15.0	ug/L			01/31/14 04:32	5
Benzene	<2.05		5.00	2.05	ug/L			01/31/14 04:32	5
Bromobenzene	<4.00		5.00	4.00	ug/L			01/31/14 04:32	5
Bromoform	<1.30		5.00	1.30	ug/L			01/31/14 04:32	5
Bromomethane	<3.45		10.0	3.45	ug/L			01/31/14 04:32	5
Carbon disulfide	<0.950		50.0	0.950	ug/L			01/31/14 04:32	5
Carbon tetrachloride	<1.35		5.00	1.35	ug/L			01/31/14 04:32	5
Chlorobenzene	<3.75		5.00	3.75	ug/L			01/31/14 04:32	5
Chlorobromomethane	<4.35		5.00	4.35	ug/L			01/31/14 04:32	5
Chlorodibromomethane	<1.60		2.50	1.60	ug/L			01/31/14 04:32	5
Chloroethane	<1.60		10.0	1.60	ug/L			01/31/14 04:32	5
Chloroform	<1.70		5.00	1.70	ug/L			01/31/14 04:32	5
Chloromethane	<1.75		10.0	1.75	ug/L			01/31/14 04:32	5
cis-1,2-Dichloroethene	<4.05		5.00	4.05	ug/L			01/31/14 04:32	5
cis-1,3-Dichloropropene	<1.80		2.00	1.80	ug/L			01/31/14 04:32	5
Dichlorobromomethane	<1.95		2.50	1.95	ug/L			01/31/14 04:32	5
Dichlorodifluoromethane	<3.40		5.00	3.40	ug/L			01/31/14 04:32	5
Ethyl ether	<3.60		5.00	3.60	ug/L			01/31/14 04:32	5
Ethylbenzene	<3.70		5.00	3.70	ug/L			01/31/14 04:32	5
Ethylene Dibromide	<3.65		5.00	3.65	ug/L			01/31/14 04:32	5
Hexachlorobutadiene	<1.40		2.00	1.40	ug/L			01/31/14 04:32	5
Isopropyl ether	<2.95		50.0	2.95	ug/L			01/31/14 04:32	5
Isopropylbenzene	<3.95		5.00	3.95	ug/L			01/31/14 04:32	5
Methyl tert-butyl ether	<0.800		5.00	0.800	ug/L			01/31/14 04:32	5
Methylene Chloride	<2.20		5.00	2.20	ug/L			01/31/14 04:32	5
m-Xylene & p-Xylene	<3.30		10.0	3.30	ug/L			01/31/14 04:32	5
Naphthalene	<2.15		25.0	2.15	ug/L			01/31/14 04:32	5
n-Butylbenzene	<3.20		5.00	3.20	ug/L			01/31/14 04:32	5
N-Propylbenzene	<3.45		5.00	3.45	ug/L			01/31/14 04:32	5
o-Xylene	<3.80		5.00	3.80	ug/L			01/31/14 04:32	5
sec-Butylbenzene	<3.75		5.00	3.75	ug/L			01/31/14 04:32	5
Styrene	<3.65		5.00	3.65	ug/L			01/31/14 04:32	5
Tert-amyl methyl ether	<1.35		25.0	1.35	ug/L			01/31/14 04:32	5
Tert-butyl ethyl ether	<1.47		25.0	1.47	ug/L			01/31/14 04:32	5
tert-Butylbenzene	<4.05		5.00	4.05	ug/L			01/31/14 04:32	5
Tetrachloroethene	<1.80		5.00	1.80	ug/L			01/31/14 04:32	5
Tetrahydrofuran	<6.25 *		50.0	6.25	ug/L			01/31/14 04:32	5
Toluene	<2.55		5.00	2.55	ug/L			01/31/14 04:32	5
trans-1,2-Dichloroethene	<4.50		5.00	4.50	ug/L			01/31/14 04:32	5
trans-1,3-Dichloropropene	<1.85		2.00	1.85	ug/L			01/31/14 04:32	5
Trichloroethene	<2.30		5.00	2.30	ug/L			01/31/14 04:32	5
Trichlorofluoromethane	<4.40		5.00	4.40	ug/L			01/31/14 04:32	5
Vinyl chloride	<4.50		5.00	4.50	ug/L			01/31/14 04:32	5
Dibromomethane	<2.05		5.00	2.05	ug/L			01/31/14 04:32	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		01/31/14 04:32	5
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		01/31/14 04:32	5
4-Bromofluorobenzene (Surr)	98		70 - 130		01/31/14 04:32	5

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-10

Lab Sample ID: 480-53903-16

Date Collected: 01/28/14 09:36

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 21:09	1
C9-C10 Aromatics	<5.00		5.00	0.500	ug/L			01/29/14 21:09	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 21:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	98		70 - 130		01/29/14 21:09	1
2,5-Dibromotoluene (pid)	101		70 - 130		01/29/14 21:09	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Acenaphthene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Acenaphthylene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Anthracene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Benzo[a]anthracene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Benzo[a]pyrene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Benzo[b]fluoranthene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Benzo[g,h,i]perylene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Benzo[k]fluoranthene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Chrysene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Dibenz(a,h)anthracene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Fluoranthene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Fluorene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Indeno[1,2,3-cd]pyrene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Naphthalene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Phenanthrene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
Pyrene	<9.48		9.48	1.90	ug/L		01/30/14 05:48	01/31/14 19:17	1
C11-C22 Aromatics (unadjusted)	10.8	J B	47.4	9.48	ug/L		01/30/14 05:48	01/31/14 19:17	1
C19-C36 Aliphatics	<47.4		47.4	9.48	ug/L		01/30/14 05:48	01/31/14 19:17	1
C9-C18 Aliphatics	<47.4		47.4	9.48	ug/L		01/30/14 05:48	01/31/14 19:17	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	37	X	40 - 140	01/30/14 05:48	01/31/14 19:17	1
2-Bromonaphthalene	79		40 - 140	01/30/14 05:48	01/31/14 19:17	1
2-Fluorobiphenyl	90		40 - 140	01/30/14 05:48	01/31/14 19:17	1
o-Terphenyl	56		40 - 140	01/30/14 05:48	01/31/14 19:17	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 20:38	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 20:38	1
Barium	153		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 20:38	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 20:38	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-10

Lab Sample ID: 480-53903-16

Date Collected: 01/28/14 09:36

Matrix: Water

Date Received: 01/29/14 01:30

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.500		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 20:38	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 20:38	1
Nickel	6.17	J	10.0	1.26	ug/L		01/29/14 10:45	01/30/14 20:38	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 20:38	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:56	1
Zinc	16.5	J B	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:56	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 20:38	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 20:38	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 20:38	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:45	1

Client Sample ID: WCMW-8

Lab Sample ID: 480-53903-17

Date Collected: 01/28/14 11:02

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			01/31/14 15:13	1
1,1,1-Trichloroethane	<0.820		1.00	0.820	ug/L			01/31/14 15:13	1
1,1,2,2-Tetrachloroethane	<0.210		0.500	0.210	ug/L			01/31/14 15:13	1
1,1,2-Trichloroethane	<0.230		1.00	0.230	ug/L			01/31/14 15:13	1
1,1-Dichloroethane	<0.380		1.00	0.380	ug/L			01/31/14 15:13	1
1,1-Dichloroethene	<0.290		1.00	0.290	ug/L			01/31/14 15:13	1
1,1-Dichloropropene	<0.720		1.00	0.720	ug/L			01/31/14 15:13	1
1,2,3-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 15:13	1
1,2,3-Trichloropropane	<0.890		1.00	0.890	ug/L			01/31/14 15:13	1
1,2,4-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 15:13	1
1,2,4-Trimethylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 15:13	1
1,2-Dibromo-3-Chloropropane	<0.390		5.00	0.390	ug/L			01/31/14 15:13	1
1,2-Dichlorobenzene	<0.790		1.00	0.790	ug/L			01/31/14 15:13	1
1,2-Dichloroethane	<0.210		1.00	0.210	ug/L			01/31/14 15:13	1
1,2-Dichloropropane	<0.720		1.00	0.720	ug/L			01/31/14 15:13	1
1,3,5-Trimethylbenzene	<0.770		1.00	0.770	ug/L			01/31/14 15:13	1
1,3-Dichlorobenzene	<0.780		1.00	0.780	ug/L			01/31/14 15:13	1
1,3-Dichloropropane	<0.750		1.00	0.750	ug/L			01/31/14 15:13	1
1,4-Dichlorobenzene	<0.840		1.00	0.840	ug/L			01/31/14 15:13	1
1,4-Dioxane	<9.32		50.0	9.32	ug/L			01/31/14 15:13	1
2,2-Dichloropropane	<0.400		1.00	0.400	ug/L			01/31/14 15:13	1
2-Butanone (MEK)	<1.32	*	10.0	1.32	ug/L			01/31/14 15:13	1
2-Chlorotoluene	<0.860		1.00	0.860	ug/L			01/31/14 15:13	1
2-Hexanone	<1.24		10.0	1.24	ug/L			01/31/14 15:13	1
4-Chlorotoluene	<0.840		1.00	0.840	ug/L			01/31/14 15:13	1
4-Isopropyltoluene	<0.310		1.00	0.310	ug/L			01/31/14 15:13	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			01/31/14 15:13	1
Acetone	<3.00		50.0	3.00	ug/L			01/31/14 15:13	1
Benzene	<0.410		1.00	0.410	ug/L			01/31/14 15:13	1
Bromobenzene	<0.800		1.00	0.800	ug/L			01/31/14 15:13	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-8

Lab Sample ID: 480-53903-17

Date Collected: 01/28/14 11:02

Matrix: Water

Date Received: 01/29/14 01:30

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	<0.260		1.00	0.260	ug/L			01/31/14 15:13	1
Bromomethane	<0.690		2.00	0.690	ug/L			01/31/14 15:13	1
Carbon disulfide	<0.190		10.0	0.190	ug/L			01/31/14 15:13	1
Carbon tetrachloride	<0.270		1.00	0.270	ug/L			01/31/14 15:13	1
Chlorobenzene	<0.750		1.00	0.750	ug/L			01/31/14 15:13	1
Chlorobromomethane	<0.870		1.00	0.870	ug/L			01/31/14 15:13	1
Chlorodibromomethane	<0.320		0.500	0.320	ug/L			01/31/14 15:13	1
Chloroethane	<0.320		2.00	0.320	ug/L			01/31/14 15:13	1
Chloroform	<0.340		1.00	0.340	ug/L			01/31/14 15:13	1
Chloromethane	<0.350		2.00	0.350	ug/L			01/31/14 15:13	1
cis-1,2-Dichloroethene	2.96		1.00	0.810	ug/L			01/31/14 15:13	1
cis-1,3-Dichloropropene	<0.360		0.400	0.360	ug/L			01/31/14 15:13	1
Dichlorobromomethane	<0.390		0.500	0.390	ug/L			01/31/14 15:13	1
Dichlorodifluoromethane	<0.680		1.00	0.680	ug/L			01/31/14 15:13	1
Ethyl ether	<0.720		1.00	0.720	ug/L			01/31/14 15:13	1
Ethylbenzene	<0.740		1.00	0.740	ug/L			01/31/14 15:13	1
Ethylene Dibromide	<0.730		1.00	0.730	ug/L			01/31/14 15:13	1
Hexachlorobutadiene	<0.280		0.400	0.280	ug/L			01/31/14 15:13	1
Isopropyl ether	<0.590		10.0	0.590	ug/L			01/31/14 15:13	1
Isopropylbenzene	<0.790		1.00	0.790	ug/L			01/31/14 15:13	1
Methyl tert-butyl ether	<0.160		1.00	0.160	ug/L			01/31/14 15:13	1
Methylene Chloride	<0.440		1.00	0.440	ug/L			01/31/14 15:13	1
m-Xylene & p-Xylene	<0.660		2.00	0.660	ug/L			01/31/14 15:13	1
Naphthalene	<0.430		5.00	0.430	ug/L			01/31/14 15:13	1
n-Butylbenzene	<0.640		1.00	0.640	ug/L			01/31/14 15:13	1
N-Propylbenzene	<0.690		1.00	0.690	ug/L			01/31/14 15:13	1
o-Xylene	<0.760		1.00	0.760	ug/L			01/31/14 15:13	1
sec-Butylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 15:13	1
Styrene	<0.730		1.00	0.730	ug/L			01/31/14 15:13	1
Tert-amyl methyl ether	<0.270		5.00	0.270	ug/L			01/31/14 15:13	1
Tert-butyl ethyl ether	<0.294		5.00	0.294	ug/L			01/31/14 15:13	1
tert-Butylbenzene	<0.810		1.00	0.810	ug/L			01/31/14 15:13	1
Tetrachloroethene	1.97		1.00	0.360	ug/L			01/31/14 15:13	1
Tetrahydrofuran	<1.25		10.0	1.25	ug/L			01/31/14 15:13	1
Toluene	<0.510		1.00	0.510	ug/L			01/31/14 15:13	1
trans-1,2-Dichloroethene	<0.900		1.00	0.900	ug/L			01/31/14 15:13	1
trans-1,3-Dichloropropene	<0.370		0.400	0.370	ug/L			01/31/14 15:13	1
Trichloroethene	2.26		1.00	0.460	ug/L			01/31/14 15:13	1
Trichlorofluoromethane	<0.880		1.00	0.880	ug/L			01/31/14 15:13	1
Vinyl chloride	<0.900		1.00	0.900	ug/L			01/31/14 15:13	1
Dibromomethane	<0.410		1.00	0.410	ug/L			01/31/14 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		70 - 130		01/31/14 15:13	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		01/31/14 15:13	1
4-Bromofluorobenzene (Surr)	100		70 - 130		01/31/14 15:13	1

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-8

Lab Sample ID: 480-53903-17

Date Collected: 01/28/14 11:02

Matrix: Water

Date Received: 01/29/14 01:30

Method: MA VPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C9-C12 Aliphatics (adjusted)	<5.00		5.00	1.50	ug/L			01/29/14 13:05	1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	2.06	J	5.00	1.50	ug/L			01/29/14 21:47	1
C9-C10 Aromatics	<5.00		5.00	0.500	ug/L			01/29/14 21:47	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 21:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	99		70 - 130		01/29/14 21:47	1
2,5-Dibromotoluene (pid)	101		70 - 130		01/29/14 21:47	1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Acenaphthene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Acenaphthylene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Anthracene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Benzo[a]anthracene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Benzo[a]pyrene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Benzo[b]fluoranthene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Benzo[g,h,i]perylene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Benzo[k]fluoranthene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Chrysene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Dibenz(a,h)anthracene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Fluoranthene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Fluorene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Indeno[1,2,3-cd]pyrene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Naphthalene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Phenanthrene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
Pyrene	<9.59		9.59	1.92	ug/L		01/30/14 05:48	01/31/14 19:46	1
C11-C22 Aromatics (unadjusted)	15.4	J B	48.0	9.59	ug/L		01/30/14 05:48	01/31/14 19:46	1
C19-C36 Aliphatics	16.4	J B	48.0	9.59	ug/L		01/30/14 05:48	01/31/14 19:46	1
C9-C18 Aliphatics	17.3	J	48.0	9.59	ug/L		01/30/14 05:48	01/31/14 19:46	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
C11-C22 Aromatics (Adjusted)	<50.0		50.0	50.0	ug/L			02/03/14 10:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	84		40 - 140	01/30/14 05:48	01/31/14 19:46	1
2-Bromonaphthalene	51		40 - 140	01/30/14 05:48	01/31/14 19:46	1
2-Fluorobiphenyl	78		40 - 140	01/30/14 05:48	01/31/14 19:46	1
o-Terphenyl	73		40 - 140	01/30/14 05:48	01/31/14 19:46	1

Method: 6010 - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 20:50	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 20:50	1
Barium	179		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 20:50	1
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 20:50	1
Cadmium	12.2		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 20:50	1

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-8

Lab Sample ID: 480-53903-17

Date Collected: 01/28/14 11:02

Matrix: Water

Date Received: 01/29/14 01:30

Method: 6010 - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 20:50	1
Nickel	72.9		10.0	1.26	ug/L		01/29/14 10:45	01/30/14 20:50	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 20:50	1
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:59	1
Zinc	978 B		50.0	1.50	ug/L		01/29/14 10:45	01/31/14 17:59	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 20:50	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 20:50	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 20:50	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:47	1

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		TOL (70-130)	12DCE (70-130)	BFB (70-130)
480-53903-1	WCMW-11	97	99	97
480-53903-2	MW-1R	101	101	101
480-53903-3	WCMW-7	100	100	98
480-53903-5	MW-4R	99	99	99
480-53903-6	MW-2R	100	97	100
480-53903-7	WCMW-6	99	102	98
480-53903-8	WCMW-5	100	101	101
480-53903-9	WCMW-2	97	102	98
480-53903-10	WCMW-4	99	101	98
480-53903-11	WCMW-1	99	101	99
480-53903-12	WCMW-3	99	101	99
480-53903-13	MW-3R	100	101	102
480-53903-14	WCMW-9	99	101	97
480-53903-15	TB-01272014	101	101	98
480-53903-16	WCMW-10	100	101	98
480-53903-17	WCMW-8	100	98	100
LCS 480-163849/5	Lab Control Sample	99	101	101
LCS 480-163954/4	Lab Control Sample	99	100	103
LCS 480-164048/4	Lab Control Sample	98	95	102
LCSD 480-163849/6	Lab Control Sample Dup	99	102	103
LCSD 480-163954/5	Lab Control Sample Dup	100	99	104
LCSD 480-164048/5	Lab Control Sample Dup	101	94	102
MB 480-163849/8	Method Blank	99	100	98
MB 480-163954/7	Method Blank	98	100	96
MB 480-164048/7	Method Blank	98	95	99

Surrogate Legend

TOL = Toluene-d8 (Surr)

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		25DBT2 (70-130)	25DBT1 (70-130)
480-53903-1	WCMW-11	88	91
480-53903-2	MW-1R	92	95
480-53903-3	WCMW-7	90	92
480-53903-5	MW-4R	101	100
480-53903-6	MW-2R	104	103
480-53903-7	WCMW-6	97	98
480-53903-8	WCMW-5	99	99
480-53903-9	WCMW-2	96	97
480-53903-10	WCMW-4	96	98
480-53903-11	WCMW-1	96	98
480-53903-12	WCMW-3	96	98
480-53903-13	MW-3R	93	97

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC) (Continued)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		25DBT2 (70-130)	25DBT1 (70-130)
480-53903-14	WCMW-9	98	101
480-53903-16	WCMW-10	98	101
480-53903-17	WCMW-8	99	101
LCS 480-163628/4	Lab Control Sample	88	92
LCSD 480-163628/5	Lab Control Sample Dup	88	91
MB 480-163628/3	Method Blank	87	91
Surrogate Legend			
25DBT = 2,5-Dibromotoluene (fid)			

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		1COD2 (40-140)	2BN1 (40-140)	FBP1 (40-140)	OTPH1 (40-140)
480-53903-1	WCMW-11	26 X	85	93	50
480-53903-2	MW-1R	31 X	46	76	56
480-53903-3	WCMW-7	30 X	74	83	55
480-53903-4	WCMW-907	27 X	57	85	50
480-53903-5	MW-4R	29 X	28 X	23 X	46
480-53903-6	MW-2R	32 X	21 X	48	46
480-53903-7	WCMW-6	34 X	50	77	49
480-53903-8	WCMW-5	37 X	66	79	55
480-53903-9	WCMW-2	34 X	79	88	50
480-53903-10	WCMW-4	43	77	91	68
480-53903-11	WCMW-1	51	71	81	68
480-53903-12	WCMW-3	35 X	61	83	59
480-53903-13	MW-3R	8 X	77	81	44
480-53903-14	WCMW-9	31 X	77	91	50
480-53903-16	WCMW-10	37 X	79	90	56
480-53903-17	WCMW-8	84	51	78	73
LCS 480-163794/2-B	Lab Control Sample	80	74	82	73
LCSD 480-163794/3-B	Lab Control Sample Dup	89	72	84	78
MB 480-163794/1-B	Method Blank	70	81	85	74
Surrogate Legend					
1COD = 1-Chlorooctadecane					
2BN = 2-Bromonaphthalene					
FBP = 2-Fluorobiphenyl					
OTPH = o-Terphenyl					

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-163849/8

Matrix: Water

Analysis Batch: 163849

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			01/30/14 14:19	1
1,1,1-Trichloroethane	<0.820		1.00	0.820	ug/L			01/30/14 14:19	1
1,1,2,2-Tetrachloroethane	<0.210		0.500	0.210	ug/L			01/30/14 14:19	1
1,1,2-Trichloroethane	<0.230		1.00	0.230	ug/L			01/30/14 14:19	1
1,1-Dichloroethane	<0.380		1.00	0.380	ug/L			01/30/14 14:19	1
1,1-Dichloroethene	<0.290		1.00	0.290	ug/L			01/30/14 14:19	1
1,1-Dichloropropene	<0.720		1.00	0.720	ug/L			01/30/14 14:19	1
1,2,3-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/30/14 14:19	1
1,2,3-Trichloropropane	<0.890		1.00	0.890	ug/L			01/30/14 14:19	1
1,2,4-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/30/14 14:19	1
1,2,4-Trimethylbenzene	<0.750		1.00	0.750	ug/L			01/30/14 14:19	1
1,2-Dibromo-3-Chloropropane	<0.390		5.00	0.390	ug/L			01/30/14 14:19	1
1,2-Dichlorobenzene	<0.790		1.00	0.790	ug/L			01/30/14 14:19	1
1,2-Dichloroethane	<0.210		1.00	0.210	ug/L			01/30/14 14:19	1
1,2-Dichloropropane	<0.720		1.00	0.720	ug/L			01/30/14 14:19	1
1,3,5-Trimethylbenzene	<0.770		1.00	0.770	ug/L			01/30/14 14:19	1
1,3-Dichlorobenzene	<0.780		1.00	0.780	ug/L			01/30/14 14:19	1
1,3-Dichloropropane	<0.750		1.00	0.750	ug/L			01/30/14 14:19	1
1,4-Dichlorobenzene	<0.840		1.00	0.840	ug/L			01/30/14 14:19	1
1,4-Dioxane	<9.32		50.0	9.32	ug/L			01/30/14 14:19	1
2,2-Dichloropropane	<0.400		1.00	0.400	ug/L			01/30/14 14:19	1
2-Butanone (MEK)	<1.32		10.0	1.32	ug/L			01/30/14 14:19	1
2-Chlorotoluene	<0.860		1.00	0.860	ug/L			01/30/14 14:19	1
2-Hexanone	<1.24		10.0	1.24	ug/L			01/30/14 14:19	1
4-Chlorotoluene	<0.840		1.00	0.840	ug/L			01/30/14 14:19	1
4-Isopropyltoluene	<0.310		1.00	0.310	ug/L			01/30/14 14:19	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			01/30/14 14:19	1
Acetone	<3.00		50.0	3.00	ug/L			01/30/14 14:19	1
Benzene	<0.410		1.00	0.410	ug/L			01/30/14 14:19	1
Bromobenzene	<0.800		1.00	0.800	ug/L			01/30/14 14:19	1
Bromoform	<0.260		1.00	0.260	ug/L			01/30/14 14:19	1
Bromomethane	<0.690		2.00	0.690	ug/L			01/30/14 14:19	1
Carbon disulfide	<0.190		10.0	0.190	ug/L			01/30/14 14:19	1
Carbon tetrachloride	<0.270		1.00	0.270	ug/L			01/30/14 14:19	1
Chlorobenzene	<0.750		1.00	0.750	ug/L			01/30/14 14:19	1
Chlorobromomethane	<0.870		1.00	0.870	ug/L			01/30/14 14:19	1
Chlorodibromomethane	<0.320		0.500	0.320	ug/L			01/30/14 14:19	1
Chloroethane	<0.320		2.00	0.320	ug/L			01/30/14 14:19	1
Chloroform	<0.340		1.00	0.340	ug/L			01/30/14 14:19	1
Chloromethane	<0.350		2.00	0.350	ug/L			01/30/14 14:19	1
cis-1,2-Dichloroethene	<0.810		1.00	0.810	ug/L			01/30/14 14:19	1
cis-1,3-Dichloropropene	<0.360		0.400	0.360	ug/L			01/30/14 14:19	1
Dichlorobromomethane	<0.390		0.500	0.390	ug/L			01/30/14 14:19	1
Dichlorodifluoromethane	<0.680		1.00	0.680	ug/L			01/30/14 14:19	1
Ethyl ether	<0.720		1.00	0.720	ug/L			01/30/14 14:19	1
Ethylbenzene	<0.740		1.00	0.740	ug/L			01/30/14 14:19	1
Ethylene Dibromide	<0.730		1.00	0.730	ug/L			01/30/14 14:19	1
Hexachlorobutadiene	<0.280		0.400	0.280	ug/L			01/30/14 14:19	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-163849/8

Matrix: Water

Analysis Batch: 163849

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.590		10.0	0.590	ug/L			01/30/14 14:19	1
Isopropylbenzene	<0.790		1.00	0.790	ug/L			01/30/14 14:19	1
Methyl tert-butyl ether	<0.160		1.00	0.160	ug/L			01/30/14 14:19	1
Methylene Chloride	<0.440		1.00	0.440	ug/L			01/30/14 14:19	1
m-Xylene & p-Xylene	<0.660		2.00	0.660	ug/L			01/30/14 14:19	1
Naphthalene	<0.430		5.00	0.430	ug/L			01/30/14 14:19	1
n-Butylbenzene	<0.640		1.00	0.640	ug/L			01/30/14 14:19	1
N-Propylbenzene	<0.690		1.00	0.690	ug/L			01/30/14 14:19	1
o-Xylene	<0.760		1.00	0.760	ug/L			01/30/14 14:19	1
sec-Butylbenzene	<0.750		1.00	0.750	ug/L			01/30/14 14:19	1
Styrene	<0.730		1.00	0.730	ug/L			01/30/14 14:19	1
Tert-amyl methyl ether	<0.270		5.00	0.270	ug/L			01/30/14 14:19	1
Tert-butyl ethyl ether	<0.294		5.00	0.294	ug/L			01/30/14 14:19	1
tert-Butylbenzene	<0.810		1.00	0.810	ug/L			01/30/14 14:19	1
Tetrachloroethene	<0.360		1.00	0.360	ug/L			01/30/14 14:19	1
Tetrahydrofuran	<1.25		10.0	1.25	ug/L			01/30/14 14:19	1
Toluene	<0.510		1.00	0.510	ug/L			01/30/14 14:19	1
trans-1,2-Dichloroethene	<0.900		1.00	0.900	ug/L			01/30/14 14:19	1
trans-1,3-Dichloropropene	<0.370		0.400	0.370	ug/L			01/30/14 14:19	1
Trichloroethene	<0.460		1.00	0.460	ug/L			01/30/14 14:19	1
Trichlorofluoromethane	<0.880		1.00	0.880	ug/L			01/30/14 14:19	1
Vinyl chloride	<0.900		1.00	0.900	ug/L			01/30/14 14:19	1
Dibromomethane	<0.410		1.00	0.410	ug/L			01/30/14 14:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		70 - 130		01/30/14 14:19	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		01/30/14 14:19	1
4-Bromofluorobenzene (Surr)	98		70 - 130		01/30/14 14:19	1

Lab Sample ID: LCS 480-163849/5

Matrix: Water

Analysis Batch: 163849

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	26.87		ug/L		107	70 - 130
1,1,1-Trichloroethane	25.0	26.71		ug/L		107	70 - 130
1,1,2,2-Tetrachloroethane	25.0	26.75		ug/L		107	70 - 130
1,1,2-Trichloroethane	25.0	25.59		ug/L		102	70 - 130
1,1-Dichloroethane	25.0	26.80		ug/L		107	70 - 130
1,1-Dichloroethene	25.0	26.45		ug/L		106	70 - 130
1,1-Dichloropropene	25.0	27.62		ug/L		110	70 - 130
1,2,3-Trichlorobenzene	25.0	27.28		ug/L		109	70 - 130
1,2,3-Trichloropropane	25.0	26.46		ug/L		106	70 - 130
1,2,4-Trichlorobenzene	25.0	27.08		ug/L		108	70 - 130
1,2,4-Trimethylbenzene	25.0	26.27		ug/L		105	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	27.22		ug/L		109	70 - 130
1,2-Dichlorobenzene	25.0	26.47		ug/L		106	70 - 130
1,2-Dichloroethane	25.0	26.53		ug/L		106	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-163849/5

Matrix: Water

Analysis Batch: 163849

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	27.04		ug/L		108	70 - 130
1,3,5-Trimethylbenzene	25.0	26.68		ug/L		107	70 - 130
1,3-Dichlorobenzene	25.0	26.56		ug/L		106	70 - 130
1,3-Dichloropropane	25.0	25.91		ug/L		104	70 - 130
1,4-Dichlorobenzene	25.0	26.31		ug/L		105	70 - 130
1,4-Dioxane	500	427.6		ug/L		86	70 - 130
2,2-Dichloropropane	25.0	27.02		ug/L		108	70 - 130
2-Butanone (MEK)	125	238.5	*	ug/L		191	70 - 130
2-Chlorotoluene	25.0	26.80		ug/L		107	70 - 130
2-Hexanone	125	140.2		ug/L		112	70 - 130
4-Chlorotoluene	25.0	24.58		ug/L		98	70 - 130
4-Isopropyltoluene	25.0	27.29		ug/L		109	70 - 130
4-Methyl-2-pentanone (MIBK)	125	133.3		ug/L		107	70 - 130
Acetone	125	145.5		ug/L		116	70 - 130
Benzene	25.0	26.44		ug/L		106	70 - 130
Bromobenzene	25.0	26.32		ug/L		105	70 - 130
Bromoform	25.0	28.47		ug/L		114	70 - 130
Bromomethane	25.0	27.07		ug/L		108	70 - 130
Carbon disulfide	25.0	27.42		ug/L		110	70 - 130
Carbon tetrachloride	25.0	27.55		ug/L		110	70 - 130
Chlorobenzene	25.0	27.06		ug/L		108	70 - 130
Chlorobromomethane	25.0	26.67		ug/L		107	70 - 130
Chlorodibromomethane	24.5	26.88		ug/L		110	70 - 130
Chloroethane	25.0	29.14		ug/L		117	70 - 130
Chloroform	25.0	25.51		ug/L		102	70 - 130
Chloromethane	25.0	25.33		ug/L		101	70 - 130
cis-1,2-Dichloroethene	25.0	26.61		ug/L		106	70 - 130
cis-1,3-Dichloropropene	25.0	27.62		ug/L		110	70 - 130
Dichlorobromomethane	25.0	26.91		ug/L		108	70 - 130
Dichlorodifluoromethane	25.0	26.47		ug/L		106	70 - 130
Ethyl ether	25.0	27.08		ug/L		108	70 - 130
Ethylbenzene	25.0	26.90		ug/L		108	70 - 130
Ethylene Dibromide	25.0	26.05		ug/L		104	70 - 130
Hexachlorobutadiene	25.0	27.23		ug/L		109	70 - 130
Isopropyl ether	25.0	25.33		ug/L		101	70 - 130
Isopropylbenzene	25.0	26.79		ug/L		107	70 - 130
Methyl tert-butyl ether	25.0	26.01		ug/L		104	70 - 130
Methylene Chloride	25.0	26.50		ug/L		106	70 - 130
m-Xylene & p-Xylene	25.0	26.42		ug/L		106	70 - 130
Naphthalene	25.0	27.00		ug/L		108	70 - 130
n-Butylbenzene	25.0	27.17		ug/L		109	70 - 130
N-Propylbenzene	25.0	26.95		ug/L		108	70 - 130
o-Xylene	25.0	26.01		ug/L		104	70 - 130
sec-Butylbenzene	25.0	26.88		ug/L		108	70 - 130
Styrene	25.0	27.11		ug/L		108	70 - 130
Tert-amyl methyl ether	25.0	26.60		ug/L		106	70 - 130
Tert-butyl ethyl ether	25.0	24.95		ug/L		100	70 - 130
tert-Butylbenzene	25.0	27.56		ug/L		110	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-163849/5

Matrix: Water

Analysis Batch: 163849

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	26.93		ug/L		108	70 - 130
Tetrahydrofuran	50.0	68.78	*	ug/L		138	70 - 130
Toluene	25.0	26.33		ug/L		105	70 - 130
trans-1,2-Dichloroethene	25.0	26.70		ug/L		107	70 - 130
trans-1,3-Dichloropropene	25.0	26.58		ug/L		106	70 - 130
Trichloroethene	25.0	26.77		ug/L		107	70 - 130
Trichlorofluoromethane	25.0	28.80		ug/L		115	70 - 130
Vinyl chloride	25.0	25.92		ug/L		104	70 - 130
Dibromomethane	25.0	25.56		ug/L		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		70 - 130
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 480-163849/6

Matrix: Water

Analysis Batch: 163849

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	26.71		ug/L		107	70 - 130	1	20
1,1,1-Trichloroethane	25.0	25.89		ug/L		104	70 - 130	3	20
1,1,2,2-Tetrachloroethane	25.0	25.92		ug/L		104	70 - 130	3	20
1,1,2-Trichloroethane	25.0	25.47		ug/L		102	70 - 130	0	20
1,1-Dichloroethane	25.0	26.16		ug/L		105	70 - 130	2	20
1,1-Dichloroethene	25.0	25.14		ug/L		101	70 - 130	5	20
1,1-Dichloropropene	25.0	26.26		ug/L		105	70 - 130	5	20
1,2,3-Trichlorobenzene	25.0	27.31		ug/L		109	70 - 130	0	20
1,2,3-Trichloropropane	25.0	25.98		ug/L		104	70 - 130	2	20
1,2,4-Trichlorobenzene	25.0	27.44		ug/L		110	70 - 130	1	20
1,2,4-Trimethylbenzene	25.0	25.53		ug/L		102	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	25.0	26.68		ug/L		107	70 - 130	2	20
1,2-Dichlorobenzene	25.0	25.38		ug/L		102	70 - 130	4	20
1,2-Dichloroethane	25.0	25.78		ug/L		103	70 - 130	3	20
1,2-Dichloropropane	25.0	25.97		ug/L		104	70 - 130	4	20
1,3,5-Trimethylbenzene	25.0	25.29		ug/L		101	70 - 130	5	20
1,3-Dichlorobenzene	25.0	25.44		ug/L		102	70 - 130	4	20
1,3-Dichloropropane	25.0	25.66		ug/L		103	70 - 130	1	20
1,4-Dichlorobenzene	25.0	25.86		ug/L		103	70 - 130	2	20
1,4-Dioxane	500	512.9		ug/L		103	70 - 130	18	20
2,2-Dichloropropane	25.0	26.55		ug/L		106	70 - 130	2	20
2-Butanone (MEK)	125	229.7	*	ug/L		184	70 - 130	4	20
2-Chlorotoluene	25.0	25.86		ug/L		103	70 - 130	4	20
2-Hexanone	125	136.7		ug/L		109	70 - 130	3	20
4-Chlorotoluene	25.0	23.43		ug/L		94	70 - 130	5	20
4-Isopropyltoluene	25.0	25.79		ug/L		103	70 - 130	6	20
4-Methyl-2-pentanone (MIBK)	125	131.1		ug/L		105	70 - 130	2	20
Acetone	125	139.6		ug/L		112	70 - 130	4	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-163849/6

Matrix: Water

Analysis Batch: 163849

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	25.0	25.64		ug/L		103	70 - 130	3	20
Bromobenzene	25.0	25.24		ug/L		101	70 - 130	4	20
Bromoform	25.0	28.19		ug/L		113	70 - 130	1	20
Bromomethane	25.0	29.27		ug/L		117	70 - 130	8	20
Carbon disulfide	25.0	26.76		ug/L		107	70 - 130	2	20
Carbon tetrachloride	25.0	26.91		ug/L		108	70 - 130	2	20
Chlorobenzene	25.0	26.69		ug/L		107	70 - 130	1	20
Chlorobromomethane	25.0	25.69		ug/L		103	70 - 130	4	20
Chlorodibromomethane	24.5	26.54		ug/L		108	70 - 130	1	20
Chloroethane	25.0	29.10		ug/L		116	70 - 130	0	20
Chloroform	25.0	24.56		ug/L		98	70 - 130	4	20
Chloromethane	25.0	23.90		ug/L		96	70 - 130	6	20
cis-1,2-Dichloroethene	25.0	26.40		ug/L		106	70 - 130	1	20
cis-1,3-Dichloropropene	25.0	26.26		ug/L		105	70 - 130	5	20
Dichlorobromomethane	25.0	25.67		ug/L		103	70 - 130	5	20
Dichlorodifluoromethane	25.0	25.64		ug/L		103	70 - 130	3	20
Ethyl ether	25.0	27.56		ug/L		110	70 - 130	2	20
Ethylbenzene	25.0	26.45		ug/L		106	70 - 130	2	20
Ethylene Dibromide	25.0	25.50		ug/L		102	70 - 130	2	20
Hexachlorobutadiene	25.0	26.19		ug/L		105	70 - 130	4	20
Isopropyl ether	25.0	24.97		ug/L		100	70 - 130	1	20
Isopropylbenzene	25.0	25.49		ug/L		102	70 - 130	5	20
Methyl tert-butyl ether	25.0	25.98		ug/L		104	70 - 130	0	20
Methylene Chloride	25.0	26.09		ug/L		104	70 - 130	2	20
m-Xylene & p-Xylene	25.0	25.61		ug/L		102	70 - 130	3	20
Naphthalene	25.0	27.15		ug/L		109	70 - 130	1	20
n-Butylbenzene	25.0	26.21		ug/L		105	70 - 130	4	20
N-Propylbenzene	25.0	25.41		ug/L		102	70 - 130	6	20
o-Xylene	25.0	25.90		ug/L		104	70 - 130	0	20
sec-Butylbenzene	25.0	25.67		ug/L		103	70 - 130	5	20
Styrene	25.0	26.50		ug/L		106	70 - 130	2	20
Tert-amyl methyl ether	25.0	25.83		ug/L		103	70 - 130	3	20
Tert-butyl ethyl ether	25.0	24.40		ug/L		98	70 - 130	2	20
tert-Butylbenzene	25.0	26.22		ug/L		105	70 - 130	5	20
Tetrachloroethene	25.0	26.66		ug/L		107	70 - 130	1	20
Tetrahydrofuran	50.0	67.57	*	ug/L		135	70 - 130	2	20
Toluene	25.0	25.46		ug/L		102	70 - 130	3	20
trans-1,2-Dichloroethene	25.0	25.88		ug/L		104	70 - 130	3	20
trans-1,3-Dichloropropene	25.0	26.13		ug/L		105	70 - 130	2	20
Trichloroethene	25.0	26.05		ug/L		104	70 - 130	3	20
Trichlorofluoromethane	25.0	28.07		ug/L		112	70 - 130	3	20
Vinyl chloride	25.0	24.91		ug/L		100	70 - 130	4	20
Dibromomethane	25.0	25.63		ug/L		103	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	99		70 - 130
1,2-Dichloroethane-d4 (Surr)	102		70 - 130
4-Bromofluorobenzene (Surr)	103		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-163954/7

Matrix: Water

Analysis Batch: 163954

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			01/31/14 00:48	1
1,1,1-Trichloroethane	<0.820		1.00	0.820	ug/L			01/31/14 00:48	1
1,1,2,2-Tetrachloroethane	<0.210		0.500	0.210	ug/L			01/31/14 00:48	1
1,1,2-Trichloroethane	<0.230		1.00	0.230	ug/L			01/31/14 00:48	1
1,1-Dichloroethane	<0.380		1.00	0.380	ug/L			01/31/14 00:48	1
1,1-Dichloroethene	<0.290		1.00	0.290	ug/L			01/31/14 00:48	1
1,1-Dichloropropene	<0.720		1.00	0.720	ug/L			01/31/14 00:48	1
1,2,3-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 00:48	1
1,2,3-Trichloropropane	<0.890		1.00	0.890	ug/L			01/31/14 00:48	1
1,2,4-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 00:48	1
1,2,4-Trimethylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 00:48	1
1,2-Dibromo-3-Chloropropane	<0.390		5.00	0.390	ug/L			01/31/14 00:48	1
1,2-Dichlorobenzene	<0.790		1.00	0.790	ug/L			01/31/14 00:48	1
1,2-Dichloroethane	<0.210		1.00	0.210	ug/L			01/31/14 00:48	1
1,2-Dichloropropane	<0.720		1.00	0.720	ug/L			01/31/14 00:48	1
1,3,5-Trimethylbenzene	<0.770		1.00	0.770	ug/L			01/31/14 00:48	1
1,3-Dichlorobenzene	<0.780		1.00	0.780	ug/L			01/31/14 00:48	1
1,3-Dichloropropane	<0.750		1.00	0.750	ug/L			01/31/14 00:48	1
1,4-Dichlorobenzene	<0.840		1.00	0.840	ug/L			01/31/14 00:48	1
1,4-Dioxane	<9.32		50.0	9.32	ug/L			01/31/14 00:48	1
2,2-Dichloropropane	<0.400		1.00	0.400	ug/L			01/31/14 00:48	1
2-Butanone (MEK)	<1.32		10.0	1.32	ug/L			01/31/14 00:48	1
2-Chlorotoluene	<0.860		1.00	0.860	ug/L			01/31/14 00:48	1
2-Hexanone	<1.24		10.0	1.24	ug/L			01/31/14 00:48	1
4-Chlorotoluene	<0.840		1.00	0.840	ug/L			01/31/14 00:48	1
4-Isopropyltoluene	<0.310		1.00	0.310	ug/L			01/31/14 00:48	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			01/31/14 00:48	1
Acetone	<3.00		50.0	3.00	ug/L			01/31/14 00:48	1
Benzene	<0.410		1.00	0.410	ug/L			01/31/14 00:48	1
Bromobenzene	<0.800		1.00	0.800	ug/L			01/31/14 00:48	1
Bromoform	<0.260		1.00	0.260	ug/L			01/31/14 00:48	1
Bromomethane	<0.690		2.00	0.690	ug/L			01/31/14 00:48	1
Carbon disulfide	<0.190		10.0	0.190	ug/L			01/31/14 00:48	1
Carbon tetrachloride	<0.270		1.00	0.270	ug/L			01/31/14 00:48	1
Chlorobenzene	<0.750		1.00	0.750	ug/L			01/31/14 00:48	1
Chlorobromomethane	<0.870		1.00	0.870	ug/L			01/31/14 00:48	1
Chlorodibromomethane	<0.320		0.500	0.320	ug/L			01/31/14 00:48	1
Chloroethane	<0.320		2.00	0.320	ug/L			01/31/14 00:48	1
Chloroform	<0.340		1.00	0.340	ug/L			01/31/14 00:48	1
Chloromethane	<0.350		2.00	0.350	ug/L			01/31/14 00:48	1
cis-1,2-Dichloroethene	<0.810		1.00	0.810	ug/L			01/31/14 00:48	1
cis-1,3-Dichloropropene	<0.360		0.400	0.360	ug/L			01/31/14 00:48	1
Dichlorobromomethane	<0.390		0.500	0.390	ug/L			01/31/14 00:48	1
Dichlorodifluoromethane	<0.680		1.00	0.680	ug/L			01/31/14 00:48	1
Ethyl ether	<0.720		1.00	0.720	ug/L			01/31/14 00:48	1
Ethylbenzene	<0.740		1.00	0.740	ug/L			01/31/14 00:48	1
Ethylene Dibromide	<0.730		1.00	0.730	ug/L			01/31/14 00:48	1
Hexachlorobutadiene	<0.280		0.400	0.280	ug/L			01/31/14 00:48	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-163954/7

Matrix: Water

Analysis Batch: 163954

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.590		10.0	0.590	ug/L			01/31/14 00:48	1
Isopropylbenzene	<0.790		1.00	0.790	ug/L			01/31/14 00:48	1
Methyl tert-butyl ether	<0.160		1.00	0.160	ug/L			01/31/14 00:48	1
Methylene Chloride	<0.440		1.00	0.440	ug/L			01/31/14 00:48	1
m-Xylene & p-Xylene	<0.660		2.00	0.660	ug/L			01/31/14 00:48	1
Naphthalene	<0.430		5.00	0.430	ug/L			01/31/14 00:48	1
n-Butylbenzene	<0.640		1.00	0.640	ug/L			01/31/14 00:48	1
N-Propylbenzene	<0.690		1.00	0.690	ug/L			01/31/14 00:48	1
o-Xylene	<0.760		1.00	0.760	ug/L			01/31/14 00:48	1
sec-Butylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 00:48	1
Styrene	<0.730		1.00	0.730	ug/L			01/31/14 00:48	1
Tert-amyl methyl ether	<0.270		5.00	0.270	ug/L			01/31/14 00:48	1
Tert-butyl ethyl ether	<0.294		5.00	0.294	ug/L			01/31/14 00:48	1
tert-Butylbenzene	<0.810		1.00	0.810	ug/L			01/31/14 00:48	1
Tetrachloroethene	<0.360		1.00	0.360	ug/L			01/31/14 00:48	1
Tetrahydrofuran	<1.25		10.0	1.25	ug/L			01/31/14 00:48	1
Toluene	<0.510		1.00	0.510	ug/L			01/31/14 00:48	1
trans-1,2-Dichloroethene	<0.900		1.00	0.900	ug/L			01/31/14 00:48	1
trans-1,3-Dichloropropene	<0.370		0.400	0.370	ug/L			01/31/14 00:48	1
Trichloroethene	<0.460		1.00	0.460	ug/L			01/31/14 00:48	1
Trichlorofluoromethane	<0.880		1.00	0.880	ug/L			01/31/14 00:48	1
Vinyl chloride	<0.900		1.00	0.900	ug/L			01/31/14 00:48	1
Dibromomethane	<0.410		1.00	0.410	ug/L			01/31/14 00:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		70 - 130		01/31/14 00:48	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		01/31/14 00:48	1
4-Bromofluorobenzene (Surr)	96		70 - 130		01/31/14 00:48	1

Lab Sample ID: LCS 480-163954/4

Matrix: Water

Analysis Batch: 163954

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	25.0	25.11		ug/L		100	70 - 130
1,1,1-Trichloroethane	25.0	24.59		ug/L		98	70 - 130
1,1,2,2-Tetrachloroethane	25.0	25.17		ug/L		101	70 - 130
1,1,2-Trichloroethane	25.0	24.75		ug/L		99	70 - 130
1,1-Dichloroethane	25.0	25.09		ug/L		100	70 - 130
1,1-Dichloroethene	25.0	24.15		ug/L		97	70 - 130
1,1-Dichloropropene	25.0	24.97		ug/L		100	70 - 130
1,2,3-Trichlorobenzene	25.0	26.97		ug/L		108	70 - 130
1,2,3-Trichloropropane	25.0	25.07		ug/L		100	70 - 130
1,2,4-Trichlorobenzene	25.0	26.98		ug/L		108	70 - 130
1,2,4-Trimethylbenzene	25.0	25.15		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	25.0	26.07		ug/L		104	70 - 130
1,2-Dichlorobenzene	25.0	24.68		ug/L		99	70 - 130
1,2-Dichloroethane	25.0	24.70		ug/L		99	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-163954/4

Matrix: Water

Analysis Batch: 163954

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	25.0	25.00		ug/L		100	70 - 130
1,3,5-Trimethylbenzene	25.0	25.47		ug/L		102	70 - 130
1,3-Dichlorobenzene	25.0	25.13		ug/L		101	70 - 130
1,3-Dichloropropane	25.0	24.70		ug/L		99	70 - 130
1,4-Dichlorobenzene	25.0	25.22		ug/L		101	70 - 130
1,4-Dioxane	500	481.0		ug/L		96	70 - 130
2,2-Dichloropropane	25.0	24.32		ug/L		97	70 - 130
2-Butanone (MEK)	125	131.4		ug/L		105	70 - 130
2-Chlorotoluene	25.0	25.31		ug/L		101	70 - 130
2-Hexanone	125	130.5		ug/L		104	70 - 130
4-Chlorotoluene	25.0	23.82		ug/L		95	70 - 130
4-Isopropyltoluene	25.0	26.12		ug/L		104	70 - 130
4-Methyl-2-pentanone (MIBK)	125	125.5		ug/L		100	70 - 130
Acetone	125	135.2		ug/L		108	70 - 130
Benzene	25.0	24.68		ug/L		99	70 - 130
Bromobenzene	25.0	25.34		ug/L		101	70 - 130
Bromoform	25.0	25.56		ug/L		102	70 - 130
Bromomethane	25.0	26.36		ug/L		105	70 - 130
Carbon disulfide	25.0	24.80		ug/L		99	70 - 130
Carbon tetrachloride	25.0	24.75		ug/L		99	70 - 130
Chlorobenzene	25.0	25.15		ug/L		101	70 - 130
Chlorobromomethane	25.0	24.59		ug/L		98	70 - 130
Chlorodibromomethane	24.5	24.80		ug/L		101	70 - 130
Chloroethane	25.0	27.19		ug/L		109	70 - 130
Chloroform	25.0	23.39		ug/L		94	70 - 130
Chloromethane	25.0	25.16		ug/L		101	70 - 130
cis-1,2-Dichloroethene	25.0	24.87		ug/L		99	70 - 130
cis-1,3-Dichloropropene	25.0	25.33		ug/L		101	70 - 130
Dichlorobromomethane	25.0	24.88		ug/L		100	70 - 130
Dichlorodifluoromethane	25.0	25.60		ug/L		102	70 - 130
Ethyl ether	25.0	24.79		ug/L		99	70 - 130
Ethylbenzene	25.0	25.11		ug/L		100	70 - 130
Ethylene Dibromide	25.0	24.08		ug/L		96	70 - 130
Hexachlorobutadiene	25.0	25.82		ug/L		103	70 - 130
Isopropyl ether	25.0	26.27		ug/L		105	70 - 130
Isopropylbenzene	25.0	25.46		ug/L		102	70 - 130
Methyl tert-butyl ether	25.0	24.42		ug/L		98	70 - 130
Methylene Chloride	25.0	23.92		ug/L		96	70 - 130
m-Xylene & p-Xylene	25.0	24.38		ug/L		98	70 - 130
Naphthalene	25.0	26.14		ug/L		105	70 - 130
n-Butylbenzene	25.0	26.08		ug/L		104	70 - 130
N-Propylbenzene	25.0	25.55		ug/L		102	70 - 130
o-Xylene	25.0	24.52		ug/L		98	70 - 130
sec-Butylbenzene	25.0	25.34		ug/L		101	70 - 130
Styrene	25.0	25.16		ug/L		101	70 - 130
Tert-amyl methyl ether	25.0	26.15		ug/L		105	70 - 130
Tert-butyl ethyl ether	25.0	24.95		ug/L		100	70 - 130
tert-Butylbenzene	25.0	26.41		ug/L		106	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-163954/4

Matrix: Water

Analysis Batch: 163954

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	25.0	25.74		ug/L		103	70 - 130
Tetrahydrofuran	50.0	65.56	*	ug/L		131	70 - 130
Toluene	25.0	24.50		ug/L		98	70 - 130
trans-1,2-Dichloroethene	25.0	24.80		ug/L		99	70 - 130
trans-1,3-Dichloropropene	25.0	25.61		ug/L		102	70 - 130
Trichloroethene	25.0	25.39		ug/L		102	70 - 130
Trichlorofluoromethane	25.0	27.09		ug/L		108	70 - 130
Vinyl chloride	25.0	25.48		ug/L		102	70 - 130
Dibromomethane	25.0	24.19		ug/L		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	99		70 - 130
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 480-163954/5

Matrix: Water

Analysis Batch: 163954

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	25.15		ug/L		101	70 - 130	0	20
1,1,1-Trichloroethane	25.0	23.66		ug/L		95	70 - 130	4	20
1,1,2,2-Tetrachloroethane	25.0	24.71		ug/L		99	70 - 130	2	20
1,1,2-Trichloroethane	25.0	24.13		ug/L		97	70 - 130	3	20
1,1-Dichloroethane	25.0	24.38		ug/L		98	70 - 130	3	20
1,1-Dichloroethene	25.0	23.57		ug/L		94	70 - 130	2	20
1,1-Dichloropropene	25.0	24.29		ug/L		97	70 - 130	3	20
1,2,3-Trichlorobenzene	25.0	25.18		ug/L		101	70 - 130	7	20
1,2,3-Trichloropropane	25.0	25.14		ug/L		101	70 - 130	0	20
1,2,4-Trichlorobenzene	25.0	26.04		ug/L		104	70 - 130	4	20
1,2,4-Trimethylbenzene	25.0	24.19		ug/L		97	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	25.0	24.68		ug/L		99	70 - 130	5	20
1,2-Dichlorobenzene	25.0	23.87		ug/L		95	70 - 130	3	20
1,2-Dichloroethane	25.0	23.92		ug/L		96	70 - 130	3	20
1,2-Dichloropropane	25.0	24.90		ug/L		100	70 - 130	0	20
1,3,5-Trimethylbenzene	25.0	23.68		ug/L		95	70 - 130	7	20
1,3-Dichlorobenzene	25.0	24.31		ug/L		97	70 - 130	3	20
1,3-Dichloropropane	25.0	24.62		ug/L		98	70 - 130	0	20
1,4-Dichlorobenzene	25.0	24.22		ug/L		97	70 - 130	4	20
1,4-Dioxane	500	502.4		ug/L		100	70 - 130	4	20
2,2-Dichloropropane	25.0	23.32		ug/L		93	70 - 130	4	20
2-Butanone (MEK)	125	125.0		ug/L		100	70 - 130	5	20
2-Chlorotoluene	25.0	24.35		ug/L		97	70 - 130	4	20
2-Hexanone	125	133.0		ug/L		106	70 - 130	2	20
4-Chlorotoluene	25.0	22.53		ug/L		90	70 - 130	6	20
4-Isopropyltoluene	25.0	24.41		ug/L		98	70 - 130	7	20
4-Methyl-2-pentanone (MIBK)	125	127.8		ug/L		102	70 - 130	2	20
Acetone	125	130.6		ug/L		104	70 - 130	3	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-163954/5

Matrix: Water

Analysis Batch: 163954

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	25.0	23.96		ug/L		96	70 - 130	3	20
Bromobenzene	25.0	24.71		ug/L		99	70 - 130	3	20
Bromoform	25.0	25.43		ug/L		102	70 - 130	0	20
Bromomethane	25.0	26.07		ug/L		104	70 - 130	1	20
Carbon disulfide	25.0	23.62		ug/L		94	70 - 130	5	20
Carbon tetrachloride	25.0	23.96		ug/L		96	70 - 130	3	20
Chlorobenzene	25.0	24.73		ug/L		99	70 - 130	2	20
Chlorobromomethane	25.0	24.04		ug/L		96	70 - 130	2	20
Chlorodibromomethane	24.5	24.59		ug/L		100	70 - 130	1	20
Chloroethane	25.0	25.73		ug/L		103	70 - 130	6	20
Chloroform	25.0	22.99		ug/L		92	70 - 130	2	20
Chloromethane	25.0	24.11		ug/L		96	70 - 130	4	20
cis-1,2-Dichloroethene	25.0	24.63		ug/L		99	70 - 130	1	20
cis-1,3-Dichloropropene	25.0	25.08		ug/L		100	70 - 130	1	20
Dichlorobromomethane	25.0	24.10		ug/L		96	70 - 130	3	20
Dichlorodifluoromethane	25.0	23.58		ug/L		94	70 - 130	8	20
Ethyl ether	25.0	24.84		ug/L		99	70 - 130	0	20
Ethylbenzene	25.0	24.72		ug/L		99	70 - 130	2	20
Ethylene Dibromide	25.0	24.35		ug/L		97	70 - 130	1	20
Hexachlorobutadiene	25.0	23.99		ug/L		96	70 - 130	7	20
Isopropyl ether	25.0	25.84		ug/L		103	70 - 130	2	20
Isopropylbenzene	25.0	24.14		ug/L		97	70 - 130	5	20
Methyl tert-butyl ether	25.0	24.26		ug/L		97	70 - 130	1	20
Methylene Chloride	25.0	23.00		ug/L		92	70 - 130	4	20
m-Xylene & p-Xylene	25.0	24.13		ug/L		97	70 - 130	1	20
Naphthalene	25.0	25.16		ug/L		101	70 - 130	4	20
n-Butylbenzene	25.0	24.75		ug/L		99	70 - 130	5	20
N-Propylbenzene	25.0	24.22		ug/L		97	70 - 130	5	20
o-Xylene	25.0	24.14		ug/L		97	70 - 130	2	20
sec-Butylbenzene	25.0	24.01		ug/L		96	70 - 130	5	20
Styrene	25.0	25.27		ug/L		101	70 - 130	0	20
Tert-amyl methyl ether	25.0	25.85		ug/L		103	70 - 130	1	20
Tert-butyl ethyl ether	25.0	24.77		ug/L		99	70 - 130	1	20
tert-Butylbenzene	25.0	25.58		ug/L		102	70 - 130	3	20
Tetrachloroethene	25.0	25.17		ug/L		101	70 - 130	2	20
Tetrahydrofuran	50.0	63.85		ug/L		128	70 - 130	3	20
Toluene	25.0	24.39		ug/L		98	70 - 130	0	20
trans-1,2-Dichloroethene	25.0	24.16		ug/L		97	70 - 130	3	20
trans-1,3-Dichloropropene	25.0	23.96		ug/L		96	70 - 130	7	20
Trichloroethene	25.0	24.25		ug/L		97	70 - 130	5	20
Trichlorofluoromethane	25.0	26.38		ug/L		106	70 - 130	3	20
Vinyl chloride	25.0	24.26		ug/L		97	70 - 130	5	20
Dibromomethane	25.0	23.73		ug/L		95	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	100		70 - 130
1,2-Dichloroethane-d4 (Surr)	99		70 - 130
4-Bromofluorobenzene (Surr)	104		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-164048/7

Matrix: Water

Analysis Batch: 164048

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.350		1.00	0.350	ug/L			01/31/14 13:27	1
1,1,1-Trichloroethane	<0.820		1.00	0.820	ug/L			01/31/14 13:27	1
1,1,2,2-Tetrachloroethane	<0.210		0.500	0.210	ug/L			01/31/14 13:27	1
1,1,2-Trichloroethane	<0.230		1.00	0.230	ug/L			01/31/14 13:27	1
1,1-Dichloroethane	<0.380		1.00	0.380	ug/L			01/31/14 13:27	1
1,1-Dichloroethene	<0.290		1.00	0.290	ug/L			01/31/14 13:27	1
1,1-Dichloropropene	<0.720		1.00	0.720	ug/L			01/31/14 13:27	1
1,2,3-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 13:27	1
1,2,3-Trichloropropane	<0.890		1.00	0.890	ug/L			01/31/14 13:27	1
1,2,4-Trichlorobenzene	<0.410		1.00	0.410	ug/L			01/31/14 13:27	1
1,2,4-Trimethylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 13:27	1
1,2-Dibromo-3-Chloropropane	<0.390		5.00	0.390	ug/L			01/31/14 13:27	1
1,2-Dichlorobenzene	<0.790		1.00	0.790	ug/L			01/31/14 13:27	1
1,2-Dichloroethane	<0.210		1.00	0.210	ug/L			01/31/14 13:27	1
1,2-Dichloropropane	<0.720		1.00	0.720	ug/L			01/31/14 13:27	1
1,3,5-Trimethylbenzene	<0.770		1.00	0.770	ug/L			01/31/14 13:27	1
1,3-Dichlorobenzene	<0.780		1.00	0.780	ug/L			01/31/14 13:27	1
1,3-Dichloropropane	<0.750		1.00	0.750	ug/L			01/31/14 13:27	1
1,4-Dichlorobenzene	<0.840		1.00	0.840	ug/L			01/31/14 13:27	1
1,4-Dioxane	<9.32		50.0	9.32	ug/L			01/31/14 13:27	1
2,2-Dichloropropane	<0.400		1.00	0.400	ug/L			01/31/14 13:27	1
2-Butanone (MEK)	<1.32		10.0	1.32	ug/L			01/31/14 13:27	1
2-Chlorotoluene	<0.860		1.00	0.860	ug/L			01/31/14 13:27	1
2-Hexanone	<1.24		10.0	1.24	ug/L			01/31/14 13:27	1
4-Chlorotoluene	<0.840		1.00	0.840	ug/L			01/31/14 13:27	1
4-Isopropyltoluene	<0.310		1.00	0.310	ug/L			01/31/14 13:27	1
4-Methyl-2-pentanone (MIBK)	<2.10		10.0	2.10	ug/L			01/31/14 13:27	1
Acetone	<3.00		50.0	3.00	ug/L			01/31/14 13:27	1
Benzene	<0.410		1.00	0.410	ug/L			01/31/14 13:27	1
Bromobenzene	<0.800		1.00	0.800	ug/L			01/31/14 13:27	1
Bromoform	<0.260		1.00	0.260	ug/L			01/31/14 13:27	1
Bromomethane	<0.690		2.00	0.690	ug/L			01/31/14 13:27	1
Carbon disulfide	<0.190		10.0	0.190	ug/L			01/31/14 13:27	1
Carbon tetrachloride	<0.270		1.00	0.270	ug/L			01/31/14 13:27	1
Chlorobenzene	<0.750		1.00	0.750	ug/L			01/31/14 13:27	1
Chlorobromomethane	<0.870		1.00	0.870	ug/L			01/31/14 13:27	1
Chlorodibromomethane	<0.320		0.500	0.320	ug/L			01/31/14 13:27	1
Chloroethane	<0.320		2.00	0.320	ug/L			01/31/14 13:27	1
Chloroform	<0.340		1.00	0.340	ug/L			01/31/14 13:27	1
Chloromethane	<0.350		2.00	0.350	ug/L			01/31/14 13:27	1
cis-1,2-Dichloroethene	<0.810		1.00	0.810	ug/L			01/31/14 13:27	1
cis-1,3-Dichloropropene	<0.360		0.400	0.360	ug/L			01/31/14 13:27	1
Dichlorobromomethane	<0.390		0.500	0.390	ug/L			01/31/14 13:27	1
Dichlorodifluoromethane	<0.680		1.00	0.680	ug/L			01/31/14 13:27	1
Ethyl ether	<0.720		1.00	0.720	ug/L			01/31/14 13:27	1
Ethylbenzene	<0.740		1.00	0.740	ug/L			01/31/14 13:27	1
Ethylene Dibromide	<0.730		1.00	0.730	ug/L			01/31/14 13:27	1
Hexachlorobutadiene	<0.280		0.400	0.280	ug/L			01/31/14 13:27	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-164048/7

Matrix: Water

Analysis Batch: 164048

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropyl ether	<0.590		10.0	0.590	ug/L			01/31/14 13:27	1
Isopropylbenzene	<0.790		1.00	0.790	ug/L			01/31/14 13:27	1
Methyl tert-butyl ether	<0.160		1.00	0.160	ug/L			01/31/14 13:27	1
Methylene Chloride	<0.440		1.00	0.440	ug/L			01/31/14 13:27	1
m-Xylene & p-Xylene	<0.660		2.00	0.660	ug/L			01/31/14 13:27	1
Naphthalene	<0.430		5.00	0.430	ug/L			01/31/14 13:27	1
n-Butylbenzene	<0.640		1.00	0.640	ug/L			01/31/14 13:27	1
N-Propylbenzene	<0.690		1.00	0.690	ug/L			01/31/14 13:27	1
o-Xylene	<0.760		1.00	0.760	ug/L			01/31/14 13:27	1
sec-Butylbenzene	<0.750		1.00	0.750	ug/L			01/31/14 13:27	1
Styrene	<0.730		1.00	0.730	ug/L			01/31/14 13:27	1
Tert-amyl methyl ether	<0.270		5.00	0.270	ug/L			01/31/14 13:27	1
Tert-butyl ethyl ether	<0.294		5.00	0.294	ug/L			01/31/14 13:27	1
tert-Butylbenzene	<0.810		1.00	0.810	ug/L			01/31/14 13:27	1
Tetrachloroethene	<0.360		1.00	0.360	ug/L			01/31/14 13:27	1
Tetrahydrofuran	<1.25		10.0	1.25	ug/L			01/31/14 13:27	1
Toluene	<0.510		1.00	0.510	ug/L			01/31/14 13:27	1
trans-1,2-Dichloroethene	<0.900		1.00	0.900	ug/L			01/31/14 13:27	1
trans-1,3-Dichloropropene	<0.370		0.400	0.370	ug/L			01/31/14 13:27	1
Trichloroethene	<0.460		1.00	0.460	ug/L			01/31/14 13:27	1
Trichlorofluoromethane	<0.880		1.00	0.880	ug/L			01/31/14 13:27	1
Vinyl chloride	<0.900		1.00	0.900	ug/L			01/31/14 13:27	1
Dibromomethane	<0.410		1.00	0.410	ug/L			01/31/14 13:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		70 - 130		01/31/14 13:27	1
1,2-Dichloroethane-d4 (Surr)	95		70 - 130		01/31/14 13:27	1
4-Bromofluorobenzene (Surr)	99		70 - 130		01/31/14 13:27	1

Lab Sample ID: LCS 480-164048/4

Matrix: Water

Analysis Batch: 164048

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	12.5	11.42		ug/L		91	70 - 130
1,1,1-Trichloroethane	12.5	11.39		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	12.5	11.03		ug/L		88	70 - 130
1,1,2-Trichloroethane	12.5	11.01		ug/L		88	70 - 130
1,1-Dichloroethane	12.5	10.81		ug/L		86	70 - 130
1,1-Dichloroethene	12.5	10.93		ug/L		87	70 - 130
1,1-Dichloropropene	12.5	11.00		ug/L		88	70 - 130
1,2,3-Trichlorobenzene	12.5	10.77		ug/L		86	70 - 130
1,2,3-Trichloropropane	12.5	10.83		ug/L		87	70 - 130
1,2,4-Trichlorobenzene	12.5	11.18		ug/L		89	70 - 130
1,2,4-Trimethylbenzene	12.5	10.71		ug/L		86	70 - 130
1,2-Dibromo-3-Chloropropane	12.5	11.41		ug/L		91	70 - 130
1,2-Dichlorobenzene	12.5	11.51		ug/L		92	70 - 130
1,2-Dichloroethane	12.5	10.84		ug/L		87	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-164048/4

Matrix: Water

Analysis Batch: 164048

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	12.5	11.08		ug/L		89	70 - 130
1,3,5-Trimethylbenzene	12.5	10.81		ug/L		86	70 - 130
1,3-Dichlorobenzene	12.5	11.43		ug/L		91	70 - 130
1,3-Dichloropropane	12.5	10.92		ug/L		87	70 - 130
1,4-Dichlorobenzene	12.5	11.32		ug/L		91	70 - 130
1,4-Dioxane	250	217.4		ug/L		87	70 - 130
2,2-Dichloropropane	12.5	11.00		ug/L		88	70 - 130
2-Butanone (MEK)	62.5	103.9	*	ug/L		166	70 - 130
2-Chlorotoluene	12.5	11.23		ug/L		90	70 - 130
2-Hexanone	62.5	59.54		ug/L		95	70 - 130
4-Chlorotoluene	12.5	10.52		ug/L		84	70 - 130
4-Isopropyltoluene	12.5	11.43		ug/L		91	70 - 130
4-Methyl-2-pentanone (MIBK)	62.5	56.68		ug/L		91	70 - 130
Acetone	62.5	58.53		ug/L		94	70 - 130
Benzene	12.5	10.90		ug/L		87	70 - 130
Bromobenzene	12.5	11.48		ug/L		92	70 - 130
Bromoform	12.5	11.75		ug/L		94	70 - 130
Bromomethane	12.5	12.24		ug/L		98	70 - 130
Carbon disulfide	12.5	10.81		ug/L		87	70 - 130
Carbon tetrachloride	12.5	11.19		ug/L		90	70 - 130
Chlorobenzene	12.5	11.52		ug/L		92	70 - 130
Chlorobromomethane	12.5	11.35		ug/L		91	70 - 130
Chlorodibromomethane	12.3	11.18		ug/L		91	70 - 130
Chloroethane	12.5	12.01		ug/L		96	70 - 130
Chloroform	12.5	10.65		ug/L		85	70 - 130
Chloromethane	12.5	10.23		ug/L		82	70 - 130
cis-1,2-Dichloroethene	12.5	11.29		ug/L		90	70 - 130
cis-1,3-Dichloropropene	12.5	11.13		ug/L		89	70 - 130
Dichlorobromomethane	12.5	10.59		ug/L		85	70 - 130
Dichlorodifluoromethane	12.5	9.460		ug/L		76	70 - 130
Ethyl ether	12.5	11.11		ug/L		89	70 - 130
Ethylbenzene	12.5	11.29		ug/L		90	70 - 130
Ethylene Dibromide	12.5	10.55		ug/L		84	70 - 130
Hexachlorobutadiene	12.5	10.51		ug/L		84	70 - 130
Isopropyl ether	12.5	11.67		ug/L		93	70 - 130
Isopropylbenzene	12.5	10.73		ug/L		86	70 - 130
Methyl tert-butyl ether	12.5	11.01		ug/L		88	70 - 130
Methylene Chloride	12.5	9.393		ug/L		75	70 - 130
m-Xylene & p-Xylene	12.5	10.92		ug/L		87	70 - 130
Naphthalene	12.5	11.39		ug/L		91	70 - 130
n-Butylbenzene	12.5	11.30		ug/L		90	70 - 130
N-Propylbenzene	12.5	10.98		ug/L		88	70 - 130
o-Xylene	12.5	10.76		ug/L		86	70 - 130
sec-Butylbenzene	12.5	10.94		ug/L		88	70 - 130
Styrene	12.5	10.91		ug/L		87	70 - 130
Tert-amyl methyl ether	12.5	11.15		ug/L		89	70 - 130
Tert-butyl ethyl ether	12.5	11.10		ug/L		89	70 - 130
tert-Butylbenzene	12.5	12.02		ug/L		96	70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-164048/4

Matrix: Water

Analysis Batch: 164048

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	12.5	11.74		ug/L		94	70 - 130
Tetrahydrofuran	25.0	29.68		ug/L		119	70 - 130
Toluene	12.5	11.21		ug/L		90	70 - 130
trans-1,2-Dichloroethene	12.5	11.28		ug/L		90	70 - 130
trans-1,3-Dichloropropene	12.5	10.95		ug/L		88	70 - 130
Trichloroethene	12.5	11.71		ug/L		94	70 - 130
Trichlorofluoromethane	12.5	11.68		ug/L		93	70 - 130
Vinyl chloride	12.5	10.31		ug/L		82	70 - 130
Dibromomethane	12.5	11.26		ug/L		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	98		70 - 130
1,2-Dichloroethane-d4 (Surr)	95		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 480-164048/5

Matrix: Water

Analysis Batch: 164048

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	12.5	11.32		ug/L		91	70 - 130	1	20
1,1,1-Trichloroethane	12.5	10.74		ug/L		86	70 - 130	6	20
1,1,1,2,2-Tetrachloroethane	12.5	11.32		ug/L		91	70 - 130	3	20
1,1,2-Trichloroethane	12.5	10.94		ug/L		87	70 - 130	1	20
1,1-Dichloroethane	12.5	10.82		ug/L		87	70 - 130	0	20
1,1-Dichloroethene	12.5	10.51		ug/L		84	70 - 130	4	20
1,1-Dichloropropene	12.5	10.69		ug/L		86	70 - 130	3	20
1,2,3-Trichlorobenzene	12.5	10.72		ug/L		86	70 - 130	0	20
1,2,3-Trichloropropane	12.5	11.30		ug/L		90	70 - 130	4	20
1,2,4-Trichlorobenzene	12.5	11.09		ug/L		89	70 - 130	1	20
1,2,4-Trimethylbenzene	12.5	10.68		ug/L		85	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	12.5	11.16		ug/L		89	70 - 130	2	20
1,2-Dichlorobenzene	12.5	11.39		ug/L		91	70 - 130	1	20
1,2-Dichloroethane	12.5	10.87		ug/L		87	70 - 130	0	20
1,2-Dichloropropane	12.5	11.01		ug/L		88	70 - 130	1	20
1,3,5-Trimethylbenzene	12.5	10.85		ug/L		87	70 - 130	0	20
1,3-Dichlorobenzene	12.5	11.36		ug/L		91	70 - 130	1	20
1,3-Dichloropropane	12.5	10.79		ug/L		86	70 - 130	1	20
1,4-Dichlorobenzene	12.5	11.47		ug/L		92	70 - 130	1	20
1,4-Dioxane	250	203.4		ug/L		81	70 - 130	7	20
2,2-Dichloropropane	12.5	10.64		ug/L		85	70 - 130	3	20
2-Butanone (MEK)	62.5	105.6	*	ug/L		169	70 - 130	2	20
2-Chlorotoluene	12.5	11.01		ug/L		88	70 - 130	2	20
2-Hexanone	62.5	60.40		ug/L		97	70 - 130	1	20
4-Chlorotoluene	12.5	10.43		ug/L		83	70 - 130	1	20
4-Isopropyltoluene	12.5	11.38		ug/L		91	70 - 130	0	20
4-Methyl-2-pentanone (MIBK)	62.5	57.13		ug/L		91	70 - 130	1	20
Acetone	62.5	58.94		ug/L		94	70 - 130	1	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-164048/5

Matrix: Water

Analysis Batch: 164048

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	12.5	10.58		ug/L		85	70 - 130	3	20
Bromobenzene	12.5	11.37		ug/L		91	70 - 130	1	20
Bromoform	12.5	11.79		ug/L		94	70 - 130	0	20
Bromomethane	12.5	12.34		ug/L		99	70 - 130	1	20
Carbon disulfide	12.5	10.45		ug/L		84	70 - 130	3	20
Carbon tetrachloride	12.5	10.77		ug/L		86	70 - 130	4	20
Chlorobenzene	12.5	11.44		ug/L		92	70 - 130	1	20
Chlorobromomethane	12.5	11.01		ug/L		88	70 - 130	3	20
Chlorodibromomethane	12.3	11.43		ug/L		93	70 - 130	2	20
Chloroethane	12.5	11.87		ug/L		95	70 - 130	1	20
Chloroform	12.5	10.44		ug/L		83	70 - 130	2	20
Chloromethane	12.5	9.897		ug/L		79	70 - 130	3	20
cis-1,2-Dichloroethene	12.5	11.39		ug/L		91	70 - 130	1	20
cis-1,3-Dichloropropene	12.5	10.92		ug/L		87	70 - 130	2	20
Dichlorobromomethane	12.5	10.65		ug/L		85	70 - 130	1	20
Dichlorodifluoromethane	12.5	9.206		ug/L		74	70 - 130	3	20
Ethyl ether	12.5	11.15		ug/L		89	70 - 130	0	20
Ethylbenzene	12.5	11.17		ug/L		89	70 - 130	1	20
Ethylene Dibromide	12.5	10.53		ug/L		84	70 - 130	0	20
Hexachlorobutadiene	12.5	10.38		ug/L		83	70 - 130	1	20
Isopropyl ether	12.5	11.32		ug/L		91	70 - 130	3	20
Isopropylbenzene	12.5	10.88		ug/L		87	70 - 130	1	20
Methyl tert-butyl ether	12.5	10.85		ug/L		87	70 - 130	1	20
Methylene Chloride	12.5	9.141		ug/L		73	70 - 130	3	20
m-Xylene & p-Xylene	12.5	10.68		ug/L		85	70 - 130	2	20
Naphthalene	12.5	11.29		ug/L		90	70 - 130	1	20
n-Butylbenzene	12.5	11.10		ug/L		89	70 - 130	2	20
N-Propylbenzene	12.5	11.20		ug/L		90	70 - 130	2	20
o-Xylene	12.5	10.36		ug/L		83	70 - 130	4	20
sec-Butylbenzene	12.5	10.74		ug/L		86	70 - 130	2	20
Styrene	12.5	10.98		ug/L		88	70 - 130	1	20
Tert-amyl methyl ether	12.5	11.25		ug/L		90	70 - 130	1	20
Tert-butyl ethyl ether	12.5	10.84		ug/L		87	70 - 130	2	20
tert-Butylbenzene	12.5	11.83		ug/L		95	70 - 130	2	20
Tetrachloroethene	12.5	11.39		ug/L		91	70 - 130	3	20
Tetrahydrofuran	25.0	29.64		ug/L		119	70 - 130	0	20
Toluene	12.5	10.95		ug/L		88	70 - 130	2	20
trans-1,2-Dichloroethene	12.5	10.76		ug/L		86	70 - 130	5	20
trans-1,3-Dichloropropene	12.5	10.93		ug/L		87	70 - 130	0	20
Trichloroethene	12.5	11.16		ug/L		89	70 - 130	5	20
Trichlorofluoromethane	12.5	10.95		ug/L		88	70 - 130	6	20
Vinyl chloride	12.5	10.00		ug/L		80	70 - 130	3	20
Dibromomethane	12.5	11.35		ug/L		91	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Toluene-d8 (Surr)	101		70 - 130
1,2-Dichloroethane-d4 (Surr)	94		70 - 130
4-Bromofluorobenzene (Surr)	102		70 - 130

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: MAVPH - Massachusetts - Volatile Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 480-163628/3

Matrix: Water

Analysis Batch: 163628

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C5-C8 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 09:31	1
C9-C10 Aromatics	<5.00		5.00	0.500	ug/L			01/29/14 09:31	1
C9-C12 Aliphatics (unadjusted)	<5.00		5.00	1.50	ug/L			01/29/14 09:31	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,5-Dibromotoluene (fid)	87		70 - 130					01/29/14 09:31	1
2,5-Dibromotoluene (pid)	91		70 - 130					01/29/14 09:31	1

Lab Sample ID: LCS 480-163628/4

Matrix: Water

Analysis Batch: 163628

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C5-C8 Aliphatics (unadjusted)	15.0	15.21		ug/L		101	70 - 130
C9-C10 Aromatics	5.00	5.145		ug/L		103	70 - 130
C9-C12 Aliphatics (unadjusted)	15.0	15.04		ug/L		100	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
2,5-Dibromotoluene (fid)	88		70 - 130				
2,5-Dibromotoluene (pid)	92		70 - 130				

Lab Sample ID: LCSD 480-163628/5

Matrix: Water

Analysis Batch: 163628

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
C5-C8 Aliphatics (unadjusted)	15.0	14.97		ug/L		100	70 - 130	2	25
C9-C10 Aromatics	5.00	5.112		ug/L		102	70 - 130	1	25
C9-C12 Aliphatics (unadjusted)	15.0	14.94		ug/L		100	70 - 130	1	25
Surrogate	%Recovery	LCSD Qualifier	Limits						
2,5-Dibromotoluene (fid)	88		70 - 130						
2,5-Dibromotoluene (pid)	91		70 - 130						

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 480-163794/1-B

Matrix: Water

Analysis Batch: 164006

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 163794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Acenaphthene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Acenaphthylene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Anthracene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Benzo[a]anthracene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Benzo[a]pyrene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: MB 480-163794/1-B

Matrix: Water

Analysis Batch: 164006

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 163794

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Benzo[g,h,i]perylene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Benzo[k]fluoranthene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Chrysene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Dibenz(a,h)anthracene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Fluoranthene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Fluorene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Indeno[1,2,3-cd]pyrene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Naphthalene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Phenanthrene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
Pyrene	<10.0		10.0	2.00	ug/L		01/30/14 05:48	01/31/14 08:56	1
C11-C22 Aromatics (unadjusted)	17.44	J	50.0	10.0	ug/L		01/30/14 05:48	01/31/14 08:56	1
C19-C36 Aliphatics	11.55	J	50.0	10.0	ug/L		01/30/14 05:48	01/31/14 08:56	1
C9-C18 Aliphatics	<50.0		50.0	10.0	ug/L		01/30/14 05:48	01/31/14 08:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctadecane	70		40 - 140	01/30/14 05:48	01/31/14 08:56	1
2-Bromonaphthalene	81		40 - 140	01/30/14 05:48	01/31/14 08:56	1
2-Fluorobiphenyl	85		40 - 140	01/30/14 05:48	01/31/14 08:56	1
o-Terphenyl	74		40 - 140	01/30/14 05:48	01/31/14 08:56	1

Lab Sample ID: LCS 480-163794/2-B

Matrix: Water

Analysis Batch: 164006

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 163794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	50.0	32.15		ug/L		64	40 - 140
Acenaphthene	50.0	34.72		ug/L		69	40 - 140
Acenaphthylene	50.0	35.14		ug/L		70	40 - 140
Anthracene	50.0	40.18		ug/L		80	40 - 140
Benzo[a]anthracene	50.0	40.67		ug/L		81	40 - 140
Benzo[a]pyrene	50.0	39.80		ug/L		80	40 - 140
Benzo[b]fluoranthene	50.0	40.39		ug/L		81	40 - 140
Benzo[g,h,i]perylene	50.0	43.72		ug/L		87	40 - 140
Benzo[k]fluoranthene	50.0	40.37		ug/L		81	40 - 140
Chrysene	50.0	41.22		ug/L		82	40 - 140
Dibenz(a,h)anthracene	50.0	43.53		ug/L		87	40 - 140
Fluoranthene	50.0	40.54		ug/L		81	40 - 140
Fluorene	50.0	37.77		ug/L		76	40 - 140
Indeno[1,2,3-cd]pyrene	50.0	43.31		ug/L		87	40 - 140
Naphthalene	50.0	30.19		ug/L		60	40 - 140
Phenanthrene	50.0	40.48		ug/L		81	40 - 140
Pyrene	50.0	41.46		ug/L		83	40 - 140
C11-C22 Aromatics (unadjusted)	850	670.2		ug/L		79	40 - 140
C19-C36 Aliphatics	400	356.0		ug/L		89	40 - 140
C9-C18 Aliphatics	300	217.6		ug/L		73	40 - 140

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: MA-EPH - Massachusetts - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCS 480-163794/2-B

Matrix: Water

Analysis Batch: 164006

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 163794

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctadecane	80		40 - 140
2-Bromonaphthalene	74		40 - 140
2-Fluorobiphenyl	82		40 - 140
o-Terphenyl	73		40 - 140

Lab Sample ID: LCSD 480-163794/3-B

Matrix: Water

Analysis Batch: 164006

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 163794

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylnaphthalene	50.0	32.33		ug/L		65	40 - 140	1	25
Acenaphthene	50.0	35.65		ug/L		71	40 - 140	3	25
Acenaphthylene	50.0	38.75		ug/L		77	40 - 140	10	25
Anthracene	50.0	43.96		ug/L		88	40 - 140	9	25
Benzo[a]anthracene	50.0	42.72		ug/L		85	40 - 140	5	25
Benzo[a]pyrene	50.0	41.06		ug/L		82	40 - 140	3	25
Benzo[b]fluoranthene	50.0	41.60		ug/L		83	40 - 140	3	25
Benzo[g,h,i]perylene	50.0	45.09		ug/L		90	40 - 140	3	25
Benzo[k]fluoranthene	50.0	42.56		ug/L		85	40 - 140	5	25
Chrysene	50.0	43.09		ug/L		86	40 - 140	4	25
Dibenz[a,h]anthracene	50.0	44.19		ug/L		88	40 - 140	2	25
Fluoranthene	50.0	43.94		ug/L		88	40 - 140	8	25
Fluorene	50.0	41.77		ug/L		84	40 - 140	10	25
Indeno[1,2,3-cd]pyrene	50.0	44.83		ug/L		90	40 - 140	3	25
Naphthalene	50.0	30.44		ug/L		61	40 - 140	1	25
Phenanthrene	50.0	44.52		ug/L		89	40 - 140	9	25
Pyrene	50.0	44.82		ug/L		90	40 - 140	8	25
C11-C22 Aromatics (unadjusted)	850	732.4		ug/L		86	40 - 140	9	25
C19-C36 Aliphatics	400	396.2		ug/L		99	40 - 140	11	25
C9-C18 Aliphatics	300	255.6		ug/L		85	40 - 140	16	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctadecane	89		40 - 140
2-Bromonaphthalene	72		40 - 140
2-Fluorobiphenyl	84		40 - 140
o-Terphenyl	78		40 - 140

Method: 6010 - Metals (ICP)

Lab Sample ID: MB 480-163064/15-B

Matrix: Water

Analysis Batch: 164031

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 163657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	<1.70		5.00	1.70	ug/L		01/29/14 10:45	01/30/14 19:21	1
Arsenic	<5.55		10.0	5.55	ug/L		01/29/14 10:45	01/30/14 19:21	1
Barium	<0.700		10.0	0.700	ug/L		01/29/14 10:45	01/30/14 19:21	1

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: MB 480-163064/15-B

Matrix: Water

Analysis Batch: 164031

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 163657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.300		1.00	0.300	ug/L		01/29/14 10:45	01/30/14 19:21	1
Cadmium	<0.500		1.00	0.500	ug/L		01/29/14 10:45	01/30/14 19:21	1
Chromium	<1.00		5.00	1.00	ug/L		01/29/14 10:45	01/30/14 19:21	1
Nickel	<1.26		10.0	1.26	ug/L		01/29/14 10:45	01/30/14 19:21	1
Thallium	<10.2		20.0	10.2	ug/L		01/29/14 10:45	01/30/14 19:21	1
Lead	<3.00		5.00	3.00	ug/L		01/29/14 10:45	01/30/14 19:21	1
Selenium	<8.70		10.0	8.70	ug/L		01/29/14 10:45	01/30/14 19:21	1
Antimony	<6.79		6.00	6.79	ug/L		01/29/14 10:45	01/30/14 19:21	1

Lab Sample ID: MB 480-163064/15-B

Matrix: Water

Analysis Batch: 164246

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 163657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	<1.50		10.0	1.50	ug/L		01/29/14 10:45	01/31/14 16:42	1
Zinc	1.840	J	50.0	1.50	ug/L		01/29/14 10:45	01/31/14 16:42	1

Lab Sample ID: LCS 480-163064/16-B

Matrix: Water

Analysis Batch: 164031

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 163657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	50.0	49.09		ug/L		98	80 - 120
Arsenic	200	222.5		ug/L		111	80 - 120
Barium	200	200.0		ug/L		100	80 - 120
Beryllium	200	215.9		ug/L		108	80 - 120
Cadmium	200	208.1		ug/L		104	80 - 120
Chromium	200	194.3		ug/L		97	80 - 120
Nickel	200	209.2		ug/L		105	80 - 120
Thallium	200	200.1		ug/L		100	80 - 120
Lead	200	196.5		ug/L		98	80 - 120
Selenium	200	217.8		ug/L		109	80 - 120
Antimony	200	194.5		ug/L		97	80 - 120

Lab Sample ID: LCS 480-163064/16-B

Matrix: Water

Analysis Batch: 164246

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 163657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	200	206.3		ug/L		103	80 - 120
Zinc	200	200.7		ug/L		100	80 - 120

Lab Sample ID: LCSD 480-163064/23-B

Matrix: Water

Analysis Batch: 164031

Client Sample ID: Lab Control Sample Dup

Prep Type: Dissolved

Prep Batch: 163657

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	50.0	47.98		ug/L		96	80 - 120	13	20
Arsenic	200	220.3		ug/L		110	80 - 120	0	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: LCSD 480-163064/23-B

Matrix: Water

Analysis Batch: 164031

Client Sample ID: Lab Control Sample Dup

Prep Type: Dissolved

Prep Batch: 163657

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Barium	200	197.1		ug/L		99	80 - 120	6	20
Beryllium	200	214.3		ug/L		107	80 - 120	2	20
Cadmium	200	204.7		ug/L		102	80 - 120	5	20
Chromium	200	190.7		ug/L		95	80 - 120	6	20
Nickel	200	208.8		ug/L		104	80 - 120	3	20
Thallium	200	198.2		ug/L		99	80 - 120	8	20
Lead	200	195.7		ug/L		98	80 - 120	8	20
Selenium	200	215.2		ug/L		108	80 - 120	2	20
Antimony	200	191.8		ug/L		96	80 - 120	8	20

Lab Sample ID: LCSD 480-163064/23-B

Matrix: Water

Analysis Batch: 164246

Client Sample ID: Lab Control Sample Dup

Prep Type: Dissolved

Prep Batch: 163657

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	200	205.9		ug/L		103	80 - 120	0	20
Zinc	200	203.9		ug/L		102	80 - 120	2	20

Lab Sample ID: 480-53903-5 MS

Matrix: Water

Analysis Batch: 164031

Client Sample ID: MW-4R MS

Prep Type: Dissolved

Prep Batch: 163657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	<1.70		50.0	49.90		ug/L		100	75 - 125
Arsenic	<5.55		200	230.0		ug/L		115	75 - 125
Barium	273		200	504.8		ug/L		116	75 - 125
Beryllium	<0.300		200	212.5		ug/L		106	75 - 125
Cadmium	<0.500		200	208.5		ug/L		104	75 - 125
Chromium	<1.00		200	195.0		ug/L		98	75 - 125
Nickel	4.75	J	200	216.3		ug/L		106	75 - 125
Thallium	<10.2		200	198.8		ug/L		99	75 - 125
Lead	<3.00		200	203.0		ug/L		101	75 - 125
Selenium	<8.70		200	222.9		ug/L		111	75 - 125
Antimony	<6.79		200	198.5		ug/L		99	75 - 125

Lab Sample ID: 480-53903-5 MS

Matrix: Water

Analysis Batch: 164246

Client Sample ID: MW-4R MS

Prep Type: Dissolved

Prep Batch: 163657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vanadium	<1.50		200	209.7		ug/L		105	75 - 125
Zinc	85.6	B	200	284.4		ug/L		99	75 - 125

Lab Sample ID: 480-53903-5 MSD

Matrix: Water

Analysis Batch: 164031

Client Sample ID: MW-4R MSD

Prep Type: Dissolved

Prep Batch: 163657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Silver	<1.70		50.0	50.53		ug/L		101	75 - 125	1	20

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Method: 6010 - Metals (ICP) (Continued)

Lab Sample ID: 480-53903-5 MSD

Matrix: Water

Analysis Batch: 164031

Client Sample ID: MW-4R MSD

Prep Type: Dissolved

Prep Batch: 163657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	<5.55		200	230.9		ug/L		115	75 - 125	0	20
Barium	273		200	504.0		ug/L		116	75 - 125	0	20
Beryllium	<0.300		200	212.1		ug/L		106	75 - 125	0	20
Cadmium	<0.500		200	208.5		ug/L		104	75 - 125	0	20
Chromium	<1.00		200	194.0		ug/L		97	75 - 125	1	20
Nickel	4.75	J	200	215.7		ug/L		105	75 - 125	0	20
Thallium	<10.2		200	198.5		ug/L		99	75 - 125	0	20
Lead	<3.00		200	200.9		ug/L		100	75 - 125	1	20
Selenium	<8.70		200	226.4		ug/L		113	75 - 125	2	20
Antimony	<6.79		200	200.2		ug/L		100	75 - 125	1	20

Lab Sample ID: 480-53903-5 MSD

Matrix: Water

Analysis Batch: 164246

Client Sample ID: MW-4R MSD

Prep Type: Dissolved

Prep Batch: 163657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Vanadium	<1.50		200	213.0		ug/L		107	75 - 125	2	20
Zinc	85.6	B	200	303.6		ug/L		109	75 - 125	7	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-163064/19-B

Matrix: Water

Analysis Batch: 163721

Client Sample ID: Method Blank

Prep Type: Dissolved

Prep Batch: 163625

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.120		0.200	0.120	ug/L		01/29/14 07:45	01/29/14 12:02	1

Lab Sample ID: LCS 480-163064/20-B

Matrix: Water

Analysis Batch: 163721

Client Sample ID: Lab Control Sample

Prep Type: Dissolved

Prep Batch: 163625

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	6.67	5.950		ug/L		89	80 - 120		

Lab Sample ID: LCSD 480-163064/21-B

Matrix: Water

Analysis Batch: 163721

Client Sample ID: Lab Control Sample Dup

Prep Type: Dissolved

Prep Batch: 163625

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	6.67	6.200		ug/L		93	80 - 120	4	20

Lab Sample ID: 480-53903-5 MS

Matrix: Water

Analysis Batch: 163721

Client Sample ID: MW-4R MS

Prep Type: Dissolved

Prep Batch: 163625

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.120		6.67	6.533		ug/L		98	75 - 125		

TestAmerica Buffalo

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 480-53903-5 MSD

Matrix: Water

Analysis Batch: 163721

Client Sample ID: MW-4R MSD

Prep Type: Dissolved

Prep Batch: 163625

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.120		6.67	6.383		ug/L		96	75 - 125	2	20

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

GC/MS VOA

Analysis Batch: 163849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-1	WCMW-11	Total/NA	Water	8260C	
480-53903-2	MW-1R	Total/NA	Water	8260C	
480-53903-5	MW-4R	Total/NA	Water	8260C	
480-53903-6	MW-2R	Total/NA	Water	8260C	
480-53903-7	WCMW-6	Total/NA	Water	8260C	
480-53903-8	WCMW-5	Total/NA	Water	8260C	
480-53903-9	WCMW-2	Total/NA	Water	8260C	
LCS 480-163849/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-163849/6	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-163849/8	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 163954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-3	WCMW-7	Total/NA	Water	8260C	
480-53903-10	WCMW-4	Total/NA	Water	8260C	
480-53903-11	WCMW-1	Total/NA	Water	8260C	
480-53903-12	WCMW-3	Total/NA	Water	8260C	
480-53903-13	MW-3R	Total/NA	Water	8260C	
480-53903-14	WCMW-9	Total/NA	Water	8260C	
480-53903-15	TB-01272014	Total/NA	Water	8260C	
480-53903-16	WCMW-10	Total/NA	Water	8260C	
LCS 480-163954/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-163954/5	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-163954/7	Method Blank	Total/NA	Water	8260C	

Analysis Batch: 164048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-17	WCMW-8	Total/NA	Water	8260C	
LCS 480-164048/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-164048/5	Lab Control Sample Dup	Total/NA	Water	8260C	
MB 480-164048/7	Method Blank	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 163628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-1	WCMW-11	Total/NA	Water	MAVPH	
480-53903-2	MW-1R	Total/NA	Water	MAVPH	
480-53903-3	WCMW-7	Total/NA	Water	MAVPH	
480-53903-5	MW-4R	Total/NA	Water	MAVPH	
480-53903-6	MW-2R	Total/NA	Water	MAVPH	
480-53903-7	WCMW-6	Total/NA	Water	MAVPH	
480-53903-8	WCMW-5	Total/NA	Water	MAVPH	
480-53903-9	WCMW-2	Total/NA	Water	MAVPH	
480-53903-10	WCMW-4	Total/NA	Water	MAVPH	
480-53903-11	WCMW-1	Total/NA	Water	MAVPH	
480-53903-12	WCMW-3	Total/NA	Water	MAVPH	
480-53903-13	MW-3R	Total/NA	Water	MAVPH	
480-53903-14	WCMW-9	Total/NA	Water	MAVPH	
480-53903-16	WCMW-10	Total/NA	Water	MAVPH	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

GC VOA (Continued)

Analysis Batch: 163628 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-17	WCMW-8	Total/NA	Water	MAVPH	
LCS 480-163628/4	Lab Control Sample	Total/NA	Water	MAVPH	
LCSD 480-163628/5	Lab Control Sample Dup	Total/NA	Water	MAVPH	
MB 480-163628/3	Method Blank	Total/NA	Water	MAVPH	

Analysis Batch: 163716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-1	WCMW-11	Total/NA	Water	MA VPH	
480-53903-2	MW-1R	Total/NA	Water	MA VPH	
480-53903-3	WCMW-7	Total/NA	Water	MA VPH	
480-53903-5	MW-4R	Total/NA	Water	MA VPH	
480-53903-6	MW-2R	Total/NA	Water	MA VPH	
480-53903-7	WCMW-6	Total/NA	Water	MA VPH	
480-53903-8	WCMW-5	Total/NA	Water	MA VPH	
480-53903-9	WCMW-2	Total/NA	Water	MA VPH	
480-53903-10	WCMW-4	Total/NA	Water	MA VPH	
480-53903-11	WCMW-1	Total/NA	Water	MA VPH	
480-53903-12	WCMW-3	Total/NA	Water	MA VPH	
480-53903-13	MW-3R	Total/NA	Water	MA VPH	
480-53903-14	WCMW-9	Total/NA	Water	MA VPH	
480-53903-16	WCMW-10	Total/NA	Water	MA VPH	
480-53903-17	WCMW-8	Total/NA	Water	MA VPH	

GC Semi VOA

Prep Batch: 163794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-1	WCMW-11	Total/NA	Water	3510C	
480-53903-2	MW-1R	Total/NA	Water	3510C	
480-53903-3	WCMW-7	Total/NA	Water	3510C	
480-53903-4	WCMW-907	Total/NA	Water	3510C	
480-53903-5	MW-4R	Total/NA	Water	3510C	
480-53903-6	MW-2R	Total/NA	Water	3510C	
480-53903-7	WCMW-6	Total/NA	Water	3510C	
480-53903-8	WCMW-5	Total/NA	Water	3510C	
480-53903-9	WCMW-2	Total/NA	Water	3510C	
480-53903-10	WCMW-4	Total/NA	Water	3510C	
480-53903-11	WCMW-1	Total/NA	Water	3510C	
480-53903-12	WCMW-3	Total/NA	Water	3510C	
480-53903-13	MW-3R	Total/NA	Water	3510C	
480-53903-14	WCMW-9	Total/NA	Water	3510C	
480-53903-16	WCMW-10	Total/NA	Water	3510C	
480-53903-17	WCMW-8	Total/NA	Water	3510C	
LCS 480-163794/2-B	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-163794/3-B	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-163794/1-B	Method Blank	Total/NA	Water	3510C	

Fraction Batch: 163830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-1	WCMW-11	Total/NA	Water	MA EPH Frac	163794

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

GC Semi VOA (Continued)

Fraction Batch: 163830 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-2	MW-1R	Total/NA	Water	MA EPH Frac	163794
480-53903-3	WCMW-7	Total/NA	Water	MA EPH Frac	163794
480-53903-4	WCMW-907	Total/NA	Water	MA EPH Frac	163794
480-53903-5	MW-4R	Total/NA	Water	MA EPH Frac	163794
480-53903-6	MW-2R	Total/NA	Water	MA EPH Frac	163794
480-53903-7	WCMW-6	Total/NA	Water	MA EPH Frac	163794
480-53903-8	WCMW-5	Total/NA	Water	MA EPH Frac	163794
480-53903-9	WCMW-2	Total/NA	Water	MA EPH Frac	163794
480-53903-10	WCMW-4	Total/NA	Water	MA EPH Frac	163794
480-53903-11	WCMW-1	Total/NA	Water	MA EPH Frac	163794
480-53903-12	WCMW-3	Total/NA	Water	MA EPH Frac	163794
480-53903-13	MW-3R	Total/NA	Water	MA EPH Frac	163794
480-53903-14	WCMW-9	Total/NA	Water	MA EPH Frac	163794
480-53903-16	WCMW-10	Total/NA	Water	MA EPH Frac	163794
480-53903-17	WCMW-8	Total/NA	Water	MA EPH Frac	163794
LCS 480-163794/2-B	Lab Control Sample	Total/NA	Water	MA EPH Frac	163794
LCSD 480-163794/3-B	Lab Control Sample Dup	Total/NA	Water	MA EPH Frac	163794
MB 480-163794/1-B	Method Blank	Total/NA	Water	MA EPH Frac	163794

Analysis Batch: 164006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-1	WCMW-11	Total/NA	Water	MA-EPH	163830
480-53903-2	MW-1R	Total/NA	Water	MA-EPH	163830
480-53903-3	WCMW-7	Total/NA	Water	MA-EPH	163830
480-53903-4	WCMW-907	Total/NA	Water	MA-EPH	163830
480-53903-5	MW-4R	Total/NA	Water	MA-EPH	163830
480-53903-6	MW-2R	Total/NA	Water	MA-EPH	163830
480-53903-7	WCMW-6	Total/NA	Water	MA-EPH	163830
480-53903-8	WCMW-5	Total/NA	Water	MA-EPH	163830
480-53903-9	WCMW-2	Total/NA	Water	MA-EPH	163830
480-53903-10	WCMW-4	Total/NA	Water	MA-EPH	163830
480-53903-11	WCMW-1	Total/NA	Water	MA-EPH	163830
480-53903-12	WCMW-3	Total/NA	Water	MA-EPH	163830
480-53903-13	MW-3R	Total/NA	Water	MA-EPH	163830
480-53903-14	WCMW-9	Total/NA	Water	MA-EPH	163830
480-53903-16	WCMW-10	Total/NA	Water	MA-EPH	163830
480-53903-17	WCMW-8	Total/NA	Water	MA-EPH	163830
LCS 480-163794/2-B	Lab Control Sample	Total/NA	Water	MA-EPH	163830
LCSD 480-163794/3-B	Lab Control Sample Dup	Total/NA	Water	MA-EPH	163830
MB 480-163794/1-B	Method Blank	Total/NA	Water	MA-EPH	163830

Analysis Batch: 164270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-1	WCMW-11	Total/NA	Water	MA-EPH	
480-53903-2	MW-1R	Total/NA	Water	MA-EPH	
480-53903-3	WCMW-7	Total/NA	Water	MA-EPH	
480-53903-4	WCMW-907	Total/NA	Water	MA-EPH	
480-53903-5	MW-4R	Total/NA	Water	MA-EPH	
480-53903-6	MW-2R	Total/NA	Water	MA-EPH	
480-53903-7	WCMW-6	Total/NA	Water	MA-EPH	
480-53903-8	WCMW-5	Total/NA	Water	MA-EPH	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

GC Semi VOA (Continued)

Analysis Batch: 164270 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-9	WCMW-2	Total/NA	Water	MA-EPH	
480-53903-10	WCMW-4	Total/NA	Water	MA-EPH	
480-53903-11	WCMW-1	Total/NA	Water	MA-EPH	
480-53903-12	WCMW-3	Total/NA	Water	MA-EPH	
480-53903-13	MW-3R	Total/NA	Water	MA-EPH	
480-53903-14	WCMW-9	Total/NA	Water	MA-EPH	
480-53903-16	WCMW-10	Total/NA	Water	MA-EPH	
480-53903-17	WCMW-8	Total/NA	Water	MA-EPH	

Metals

Filtration Batch: 163064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-163064/16-B	Lab Control Sample	Dissolved	Water	FILTRATION	
LCS 480-163064/20-B	Lab Control Sample	Dissolved	Water	FILTRATION	
LCSD 480-163064/21-B	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
LCSD 480-163064/23-B	Lab Control Sample Dup	Dissolved	Water	FILTRATION	
MB 480-163064/15-B	Method Blank	Dissolved	Water	FILTRATION	
MB 480-163064/19-B	Method Blank	Dissolved	Water	FILTRATION	

Prep Batch: 163625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-1	WCMW-11	Dissolved	Water	7470A	
480-53903-2	MW-1R	Dissolved	Water	7470A	
480-53903-3	WCMW-7	Dissolved	Water	7470A	
480-53903-4	WCMW-907	Dissolved	Water	7470A	
480-53903-5	MW-4R	Dissolved	Water	7470A	
480-53903-5 MS	MW-4R MS	Dissolved	Water	7470A	
480-53903-5 MSD	MW-4R MSD	Dissolved	Water	7470A	
480-53903-6	MW-2R	Dissolved	Water	7470A	
480-53903-7	WCMW-6	Dissolved	Water	7470A	
480-53903-8	WCMW-5	Dissolved	Water	7470A	
480-53903-9	WCMW-2	Dissolved	Water	7470A	
480-53903-10	WCMW-4	Dissolved	Water	7470A	
480-53903-11	WCMW-1	Dissolved	Water	7470A	
480-53903-12	WCMW-3	Dissolved	Water	7470A	
480-53903-13	MW-3R	Dissolved	Water	7470A	
480-53903-14	WCMW-9	Dissolved	Water	7470A	
480-53903-16	WCMW-10	Dissolved	Water	7470A	
480-53903-17	WCMW-8	Dissolved	Water	7470A	
LCS 480-163064/20-B	Lab Control Sample	Dissolved	Water	7470A	163064
LCSD 480-163064/21-B	Lab Control Sample Dup	Dissolved	Water	7470A	163064
MB 480-163064/19-B	Method Blank	Dissolved	Water	7470A	163064

Prep Batch: 163657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-1	WCMW-11	Dissolved	Water	3005A	
480-53903-2	MW-1R	Dissolved	Water	3005A	
480-53903-3	WCMW-7	Dissolved	Water	3005A	
480-53903-4	WCMW-907	Dissolved	Water	3005A	

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Invervale

TestAmerica Job ID: 480-53903-1

Metals (Continued)

Prep Batch: 163657 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-5	MW-4R	Dissolved	Water	3005A	
480-53903-5 MS	MW-4R MS	Dissolved	Water	3005A	
480-53903-5 MSD	MW-4R MSD	Dissolved	Water	3005A	
480-53903-6	MW-2R	Dissolved	Water	3005A	
480-53903-7	WCMW-6	Dissolved	Water	3005A	
480-53903-8	WCMW-5	Dissolved	Water	3005A	
480-53903-9	WCMW-2	Dissolved	Water	3005A	
480-53903-10	WCMW-4	Dissolved	Water	3005A	
480-53903-11	WCMW-1	Dissolved	Water	3005A	
480-53903-12	WCMW-3	Dissolved	Water	3005A	
480-53903-13	MW-3R	Dissolved	Water	3005A	
480-53903-14	WCMW-9	Dissolved	Water	3005A	
480-53903-16	WCMW-10	Dissolved	Water	3005A	
480-53903-17	WCMW-8	Dissolved	Water	3005A	
LCS 480-163064/16-B	Lab Control Sample	Dissolved	Water	3005A	163064
LCSD 480-163064/23-B	Lab Control Sample Dup	Dissolved	Water	3005A	163064
MB 480-163064/15-B	Method Blank	Dissolved	Water	3005A	163064

Analysis Batch: 163721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-1	WCMW-11	Dissolved	Water	7470A	163625
480-53903-2	MW-1R	Dissolved	Water	7470A	163625
480-53903-3	WCMW-7	Dissolved	Water	7470A	163625
480-53903-4	WCMW-907	Dissolved	Water	7470A	163625
480-53903-5	MW-4R	Dissolved	Water	7470A	163625
480-53903-5 MS	MW-4R MS	Dissolved	Water	7470A	163625
480-53903-5 MSD	MW-4R MSD	Dissolved	Water	7470A	163625
480-53903-6	MW-2R	Dissolved	Water	7470A	163625
480-53903-7	WCMW-6	Dissolved	Water	7470A	163625
480-53903-8	WCMW-5	Dissolved	Water	7470A	163625
480-53903-9	WCMW-2	Dissolved	Water	7470A	163625
480-53903-10	WCMW-4	Dissolved	Water	7470A	163625
480-53903-11	WCMW-1	Dissolved	Water	7470A	163625
480-53903-12	WCMW-3	Dissolved	Water	7470A	163625
480-53903-13	MW-3R	Dissolved	Water	7470A	163625
480-53903-14	WCMW-9	Dissolved	Water	7470A	163625
480-53903-16	WCMW-10	Dissolved	Water	7470A	163625
480-53903-17	WCMW-8	Dissolved	Water	7470A	163625
LCS 480-163064/20-B	Lab Control Sample	Dissolved	Water	7470A	163625
LCSD 480-163064/21-B	Lab Control Sample Dup	Dissolved	Water	7470A	163625
MB 480-163064/19-B	Method Blank	Dissolved	Water	7470A	163625

Analysis Batch: 164031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-1	WCMW-11	Dissolved	Water	6010	163657
480-53903-2	MW-1R	Dissolved	Water	6010	163657
480-53903-3	WCMW-7	Dissolved	Water	6010	163657
480-53903-4	WCMW-907	Dissolved	Water	6010	163657
480-53903-5	MW-4R	Dissolved	Water	6010	163657
480-53903-5 MS	MW-4R MS	Dissolved	Water	6010	163657
480-53903-5 MSD	MW-4R MSD	Dissolved	Water	6010	163657

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Metals (Continued)

Analysis Batch: 164031 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-6	MW-2R	Dissolved	Water	6010	163657
480-53903-7	WCMW-6	Dissolved	Water	6010	163657
480-53903-8	WCMW-5	Dissolved	Water	6010	163657
480-53903-9	WCMW-2	Dissolved	Water	6010	163657
480-53903-10	WCMW-4	Dissolved	Water	6010	163657
480-53903-11	WCMW-1	Dissolved	Water	6010	163657
480-53903-12	WCMW-3	Dissolved	Water	6010	163657
480-53903-13	MW-3R	Dissolved	Water	6010	163657
480-53903-14	WCMW-9	Dissolved	Water	6010	163657
480-53903-16	WCMW-10	Dissolved	Water	6010	163657
480-53903-17	WCMW-8	Dissolved	Water	6010	163657
LCS 480-163064/16-B	Lab Control Sample	Dissolved	Water	6010	163657
LCSD 480-163064/23-B	Lab Control Sample Dup	Dissolved	Water	6010	163657
MB 480-163064/15-B	Method Blank	Dissolved	Water	6010	163657

Analysis Batch: 164246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-53903-1	WCMW-11	Dissolved	Water	6010	163657
480-53903-2	MW-1R	Dissolved	Water	6010	163657
480-53903-3	WCMW-7	Dissolved	Water	6010	163657
480-53903-4	WCMW-907	Dissolved	Water	6010	163657
480-53903-5	MW-4R	Dissolved	Water	6010	163657
480-53903-5 MS	MW-4R MS	Dissolved	Water	6010	163657
480-53903-5 MSD	MW-4R MSD	Dissolved	Water	6010	163657
480-53903-6	MW-2R	Dissolved	Water	6010	163657
480-53903-7	WCMW-6	Dissolved	Water	6010	163657
480-53903-8	WCMW-5	Dissolved	Water	6010	163657
480-53903-9	WCMW-2	Dissolved	Water	6010	163657
480-53903-10	WCMW-4	Dissolved	Water	6010	163657
480-53903-11	WCMW-1	Dissolved	Water	6010	163657
480-53903-12	WCMW-3	Dissolved	Water	6010	163657
480-53903-13	MW-3R	Dissolved	Water	6010	163657
480-53903-14	WCMW-9	Dissolved	Water	6010	163657
480-53903-16	WCMW-10	Dissolved	Water	6010	163657
480-53903-17	WCMW-8	Dissolved	Water	6010	163657
LCS 480-163064/16-B	Lab Control Sample	Dissolved	Water	6010	163657
LCSD 480-163064/23-B	Lab Control Sample Dup	Dissolved	Water	6010	163657
MB 480-163064/15-B	Method Blank	Dissolved	Water	6010	163657

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-11

Date Collected: 01/27/14 09:01

Date Received: 01/29/14 01:30

Lab Sample ID: 480-53903-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	163849	01/30/14 17:38	RAL	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 11:39	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 11:24	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:07	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 19:29	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 16:49	HTL	TAL BUF

Client Sample ID: MW-1R

Date Collected: 01/27/14 09:06

Date Received: 01/29/14 01:30

Lab Sample ID: 480-53903-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	163849	01/30/14 18:02	RAL	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 12:18	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 11:53	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:09	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 19:41	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 16:52	HTL	TAL BUF

Client Sample ID: WCMW-7

Date Collected: 01/27/14 10:03

Date Received: 01/29/14 01:30

Lab Sample ID: 480-53903-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	163954	01/31/14 01:45	LCH	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 12:56	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-7

Lab Sample ID: 480-53903-3

Date Collected: 01/27/14 10:03

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 12:23	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:10	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 19:43	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:02	HTL	TAL BUF

Client Sample ID: WCMW-907

Lab Sample ID: 480-53903-4

Date Collected: 01/27/14 10:03

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 12:53	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:12	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 19:46	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:04	HTL	TAL BUF

Client Sample ID: MW-4R

Lab Sample ID: 480-53903-5

Date Collected: 01/27/14 10:06

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	163849	01/30/14 18:50	RAL	TAL BUF
Total/NA	Analysis	MAVPH		5	163628	01/29/14 13:51	MAN	TAL BUF
Total/NA	Analysis	MA VPH		5	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 13:22	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:14	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 19:49	HTL	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: MW-4R

Lab Sample ID: 480-53903-5

Date Collected: 01/27/14 10:06

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:11	HTL	TAL BUF

Client Sample ID: MW-2R

Lab Sample ID: 480-53903-6

Date Collected: 01/27/14 11:26

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	163849	01/30/14 19:14	RAL	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 14:43	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 14:21	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:25	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 20:04	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:23	HTL	TAL BUF

Client Sample ID: WCMW-6

Lab Sample ID: 480-53903-7

Date Collected: 01/27/14 11:34

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	163849	01/30/14 19:38	RAL	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 15:21	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 14:51	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:26	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 20:15	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:26	HTL	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-5

Lab Sample ID: 480-53903-8

Date Collected: 01/27/14 12:35

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	163849	01/30/14 20:01	RAL	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 16:00	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 15:20	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:28	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 20:18	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:37	HTL	TAL BUF

Client Sample ID: WCMW-2

Lab Sample ID: 480-53903-9

Date Collected: 01/27/14 13:06

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	163849	01/30/14 20:25	RAL	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 17:17	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 15:50	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:30	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 20:21	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:40	HTL	TAL BUF

Client Sample ID: WCMW-4

Lab Sample ID: 480-53903-10

Date Collected: 01/27/14 13:45

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	163954	01/31/14 02:09	LCH	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 17:56	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 16:19	DGB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-4

Lab Sample ID: 480-53903-10

Date Collected: 01/27/14 13:45

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:33	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 20:24	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:42	HTL	TAL BUF

Client Sample ID: WCMW-1

Lab Sample ID: 480-53903-11

Date Collected: 01/27/14 14:10

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	163954	01/31/14 02:33	LCH	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 18:34	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 16:49	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:35	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 20:27	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:45	HTL	TAL BUF

Client Sample ID: WCMW-3

Lab Sample ID: 480-53903-12

Date Collected: 01/27/14 14:57

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	163954	01/31/14 02:56	LCH	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 19:13	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 17:18	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-3

Lab Sample ID: 480-53903-12

Date Collected: 01/27/14 14:57

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	7470A		1	163721	01/29/14 12:36	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 20:30	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:47	HTL	TAL BUF

Client Sample ID: MW-3R

Lab Sample ID: 480-53903-13

Date Collected: 01/27/14 15:41

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	163954	01/31/14 03:21	LCH	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 19:51	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 17:48	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:38	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 20:33	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:50	HTL	TAL BUF

Client Sample ID: WCMW-9

Lab Sample ID: 480-53903-14

Date Collected: 01/27/14 15:52

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	163954	01/31/14 03:44	LCH	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 20:30	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 18:47	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:40	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 20:35	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-9

Lab Sample ID: 480-53903-14

Date Collected: 01/27/14 15:52

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010		1	164246	01/31/14 17:53	HTL	TAL BUF

Client Sample ID: TB-01272014

Lab Sample ID: 480-53903-15

Date Collected: 01/27/14 12:00

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	163954	01/31/14 04:08	LCH	TAL BUF

Client Sample ID: WCMW-10

Lab Sample ID: 480-53903-16

Date Collected: 01/28/14 09:36

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		5	163954	01/31/14 04:32	LCH	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 21:09	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 19:17	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:45	JRK	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 20:38	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:56	HTL	TAL BUF

Client Sample ID: WCMW-8

Lab Sample ID: 480-53903-17

Date Collected: 01/28/14 11:02

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	164048	01/31/14 15:13	RAL	TAL BUF
Total/NA	Analysis	MAVPH		1	163628	01/29/14 21:47	MAN	TAL BUF
Total/NA	Analysis	MA VPH		1	163716	01/29/14 13:05	DGB	TAL BUF
Total/NA	Prep	3510C			163794	01/30/14 05:48	KEB	TAL BUF
Total/NA	Fraction	MA EPH Frac			163830	01/30/14 09:01	KEB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164006	01/31/14 19:46	DGB	TAL BUF
Total/NA	Analysis	MA-EPH		1	164270	02/03/14 10:58	DGB	TAL BUF
Dissolved	Prep	7470A			163625	01/29/14 07:45	JRK	TAL BUF
Dissolved	Analysis	7470A		1	163721	01/29/14 12:47	JRK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Client Sample ID: WCMW-8

Lab Sample ID: 480-53903-17

Date Collected: 01/28/14 11:02

Matrix: Water

Date Received: 01/29/14 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164031	01/30/14 20:50	HTL	TAL BUF
Dissolved	Prep	3005A			163657	01/29/14 10:45	EHD	TAL BUF
Dissolved	Analysis	6010		1	164246	01/31/14 17:59	HTL	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	04-01-14
Kentucky (DW)	State Program	4	90029	12-31-14
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-14
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	03-31-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-30-14
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14 *
West Virginia DEP	State Program	3	252	03-31-14
Wisconsin	State Program	5	998310390	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	MA DEP	TAL BUF
MA VPH	Massachusetts - Volatile Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
MAVPH	Massachusetts - Volatile Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
MA-EPH	Massachusetts - Extractable Petroleum Hydrocarbons (GC)	MA DEP	TAL BUF
6010	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-53903-1	WCMW-11	Water	01/27/14 09:01	01/29/14 01:30
480-53903-2	MW-1R	Water	01/27/14 09:06	01/29/14 01:30
480-53903-3	WCMW-7	Water	01/27/14 10:03	01/29/14 01:30
480-53903-4	WCMW-907	Water	01/27/14 10:03	01/29/14 01:30
480-53903-5	MW-4R	Water	01/27/14 10:06	01/29/14 01:30
480-53903-6	MW-2R	Water	01/27/14 11:26	01/29/14 01:30
480-53903-7	WCMW-6	Water	01/27/14 11:34	01/29/14 01:30
480-53903-8	WCMW-5	Water	01/27/14 12:35	01/29/14 01:30
480-53903-9	WCMW-2	Water	01/27/14 13:06	01/29/14 01:30
480-53903-10	WCMW-4	Water	01/27/14 13:45	01/29/14 01:30
480-53903-11	WCMW-1	Water	01/27/14 14:10	01/29/14 01:30
480-53903-12	WCMW-3	Water	01/27/14 14:57	01/29/14 01:30
480-53903-13	MW-3R	Water	01/27/14 15:41	01/29/14 01:30
480-53903-14	WCMW-9	Water	01/27/14 15:52	01/29/14 01:30
480-53903-15	TB-01272014	Water	01/27/14 12:00	01/29/14 01:30
480-53903-16	WCMW-10	Water	01/28/14 09:36	01/29/14 01:30
480-53903-17	WCMW-8	Water	01/28/14 11:02	01/29/14 01:30

Detection Limit Exceptions Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-53903-1

The requested project specific reporting limits listed below were less than laboratory standard quantitation limits (PQL) but greater than or equal to the laboratory method detection limits (MDL). It must be noted that results reported below lab standard quantitation limits may result in false positive/false negative values and less accurate quantitation. Routine laboratory procedures do not indicate corrective action for detections below the laboratory's PQL.

Method	Matrix	Analyte	Units	Client RL	Lab PQL
6010	Water	Antimony	mg/L	0.00600	0.00679

Chain of Custody Record



480-53903 Chain of Custody

Receipt _____

Yes ☐ No ☐

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client Woodard & Curran		Project Manager Jarrod Yoder, Ryan Smith		Date 1/28/14	Chain of Custody Number 261471
Address 980 Washington St, Ste 325N		Telephone Number (Area Code)/Fax Number 781-251-0200		Lab Number	Page 1 of 2
City Dedham	State MA	Zip Code 02026	Site Contact Ryan Smith	Lab Contact Beck Mason	Special Instructions/ Conditions of Receipt
Project Name and Location (State) Quincy-Intervale, Quincy, MA			Carrier/Waybill Number		
Contract/Purchase Order/Quote No.					

Contract/Purchase Order/Quote No.			Matrix					Containers & Preservatives					Analysis (Attach list if more space is needed)				Conditions of Receipt																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil		Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc2	NaOH	DESICCANT	VOL (SZ)	EPH (M)	VPH (M)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

NOTE:
 1. Fractions only for VPH
 2. Fractions of target analytes for EPH
 3. All dissolved metals were field filtered

→ Matrix Spike
 → Matrix Spike Dup

Possible Hazard Identification	Sample Disposal	(A fee may be assessed if samples are retained longer than 1 month)
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client <input checked="" type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	

Turn Around Time Required		QC Requirements (Specify)	
<input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input checked="" type="checkbox"/> Other 5 Day TAT		MPCAM Methods Required; report to GW-1/2 criteria Must meet GW-2 reporting limits; GIS Key & Excel with EDS	
1. Relinquished By	Date 1/28/14	Time 1320	1. Received By
2. Relinquished By	Date 1/28/14	Time	2. Received By
3. Relinquished By	Date	Time	3. Received By

Comments

2.2, 2.2, 2.7, 2.4 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy



Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-53903-1

Login Number: 53903

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-54095-1

Client Project/Site: Quincy Inervale

For:

Woodard & Curran Inc

40 Shattuck Road

Suite 110

Andover, Massachusetts 01810

Attn: Mr. Jarrod Yoder



Authorized for release by:

2/6/2014 3:04:32 PM

Rich Emerich, Analyst V

rich.emerich@testamericainc.com

Designee for

Becky Mason, Project Manager II

(413)572-4000

becky.mason@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-54095-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-54095-1

Job ID: 480-54095-1

Laboratory: TestAmerica Buffalo

Narrative

Receipt

The samples were received on 2/1/2014 at 12:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

GC Semi VOA

No analytical or quality issues were noted.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 164383.

No other analytical or quality issues were noted.

MassDEP Analytical Protocol Certification Form					
Laboratory Name: TestAmerica Buffalo		Project #: 480-54095			
Project Location: Quincy Inervale		RTN:			
This form provides certifications for the data set for the following Laboratory Sample ID Number(s): 480-54905 [1-2]					
Matrices: <input checked="" type="checkbox"/> Groundwater/Surface Water <input type="checkbox"/> Soil/Sediment <input type="checkbox"/> Drinking Water <input type="checkbox"/> Air <input type="checkbox"/> Other:					
CAM Protocols (check all that apply below):					
8260 VOC CAM II A <input type="checkbox"/>	7470/7471 Hg CAM III B <input type="checkbox"/>	Mass DEP VPH CAM IV A <input type="checkbox"/>	8081 Pesticides CAM V B <input type="checkbox"/>	7196 Hex Cr CAM VI B <input type="checkbox"/>	Mass DEP APH CAM IX A <input type="checkbox"/>
8270 SVOC CAM II B <input type="checkbox"/>	7010 Metals CAM III C <input type="checkbox"/>	Mass DEP EPH CAM IV B <input type="checkbox"/>	8151 Herbicides CAM V C <input type="checkbox"/>	8330 Explosives CAM VIII A <input type="checkbox"/>	TO-15 VOC CAM IX B <input type="checkbox"/>
6010 Metals CAM III A <input type="checkbox"/>	6020 Metals CAM III D <input type="checkbox"/>	8082 PCB CAM V A <input checked="" type="checkbox"/>	9012 / 9014/ 4500CN Total Cyanide/PAC CAM VI A <input type="checkbox"/>	6860 Perchlorate CAM VIII B <input type="checkbox"/>	
Affirmative Responses to Questions A through F are required for "Presumptive Certainty" status					
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding time.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
E	a. VPH, EPH and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications). b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Responses to Questions G, H and I below are required for "Presumptive Certainty" status					
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
<u>Data User Note:</u> Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WCS-07-350					
H	Were all QC performance standards specified in the CAM protocol(s) achieved?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s) ?				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ¹
¹ All negative responses must be addressed in an attached laboratory narrative.					
<i>I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, is accurate and complete.</i>					
Signature:		Position: <u>Technical Director, TestAmerica Westfield</u>			
Printed Name: <u>Richard Emerich</u>		Date: <u>2/6/14 13:15</u>			
This form has been electronically signed and approved.					

Detection Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-54095-1

Client Sample ID: WCMW-1 (Filtered)

Lab Sample ID: 480-54095-1

No Detections.

Client Sample ID: WCMW-1

Lab Sample ID: 480-54095-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
PCB-1242	0.154	J	0.241	0.0962	ug/L	1		8082	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-54095-1

Client Sample ID: WCMW-1 (Filtered)

Lab Sample ID: 480-54095-1

Date Collected: 01/31/14 10:36

Matrix: Water

Date Received: 02/01/14 00:10

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.233		0.233	0.0930	ug/L		02/04/14 08:02	02/05/14 07:45	1
PCB-1221	<0.233		0.233	0.0930	ug/L		02/04/14 08:02	02/05/14 07:45	1
PCB-1232	<0.233		0.233	0.0930	ug/L		02/04/14 08:02	02/05/14 07:45	1
PCB-1242	<0.233		0.233	0.0930	ug/L		02/04/14 08:02	02/05/14 07:45	1
PCB-1248	<0.233		0.233	0.0930	ug/L		02/04/14 08:02	02/05/14 07:45	1
PCB-1254	<0.233		0.233	0.0930	ug/L		02/04/14 08:02	02/05/14 07:45	1
PCB-1260	<0.233		0.233	0.0930	ug/L		02/04/14 08:02	02/05/14 07:45	1
PCB-1262	<0.233		0.233	0.0930	ug/L		02/04/14 08:02	02/05/14 07:45	1
PCB-1268	<0.233		0.233	0.0930	ug/L		02/04/14 08:02	02/05/14 07:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	68		30 - 150				02/04/14 08:02	02/05/14 07:45	1
DCB Decachlorobiphenyl	63		30 - 150				02/04/14 08:02	02/05/14 07:45	1

Client Sample ID: WCMW-1

Lab Sample ID: 480-54095-2

Date Collected: 01/31/14 10:38

Matrix: Water

Date Received: 02/01/14 00:10

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.241		0.241	0.0962	ug/L		02/04/14 08:02	02/05/14 08:01	1
PCB-1221	<0.241		0.241	0.0962	ug/L		02/04/14 08:02	02/05/14 08:01	1
PCB-1232	<0.241		0.241	0.0962	ug/L		02/04/14 08:02	02/05/14 08:01	1
PCB-1242	0.154	J	0.241	0.0962	ug/L		02/04/14 08:02	02/05/14 08:01	1
PCB-1248	<0.241		0.241	0.0962	ug/L		02/04/14 08:02	02/05/14 08:01	1
PCB-1254	<0.241		0.241	0.0962	ug/L		02/04/14 08:02	02/05/14 08:01	1
PCB-1260	<0.241		0.241	0.0962	ug/L		02/04/14 08:02	02/05/14 08:01	1
PCB-1262	<0.241		0.241	0.0962	ug/L		02/04/14 08:02	02/05/14 08:01	1
PCB-1268	<0.241		0.241	0.0962	ug/L		02/04/14 08:02	02/05/14 08:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	84		30 - 150				02/04/14 08:02	02/05/14 08:01	1
DCB Decachlorobiphenyl	63		30 - 150				02/04/14 08:02	02/05/14 08:01	1

TestAmerica Buffalo

Surrogate Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-54095-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (30-150)	DCB1 (30-150)
480-54095-1	WCMW-1 (Filtered)	68	63
480-54095-2	WCMW-1	84	63
LCS 480-164383/2-A	Lab Control Sample	77	66
LCSD 480-164383/3-A	Lab Control Sample Dup	82	62
MB 480-164383/1-A	Method Blank	75	70

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

QC Sample Results

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-54095-1

Method: 8082 - Polychlorinated Biphenyls (GC/ECD)

Lab Sample ID: MB 480-164383/1-A

Matrix: Water

Analysis Batch: 164557

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 164383

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.250		0.250	0.100	ug/L		02/04/14 08:02	02/05/14 06:57	1
PCB-1221	<0.250		0.250	0.100	ug/L		02/04/14 08:02	02/05/14 06:57	1
PCB-1232	<0.250		0.250	0.100	ug/L		02/04/14 08:02	02/05/14 06:57	1
PCB-1242	<0.250		0.250	0.100	ug/L		02/04/14 08:02	02/05/14 06:57	1
PCB-1248	<0.250		0.250	0.100	ug/L		02/04/14 08:02	02/05/14 06:57	1
PCB-1254	<0.250		0.250	0.100	ug/L		02/04/14 08:02	02/05/14 06:57	1
PCB-1260	<0.250		0.250	0.100	ug/L		02/04/14 08:02	02/05/14 06:57	1
PCB-1262	<0.250		0.250	0.100	ug/L		02/04/14 08:02	02/05/14 06:57	1
PCB-1268	<0.250		0.250	0.100	ug/L		02/04/14 08:02	02/05/14 06:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		30 - 150	02/04/14 08:02	02/05/14 06:57	1
DCB Decachlorobiphenyl	70		30 - 150	02/04/14 08:02	02/05/14 06:57	1

Lab Sample ID: LCS 480-164383/2-A

Matrix: Water

Analysis Batch: 164557

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 164383

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	4.00	3.006		ug/L		75	40 - 140
PCB-1260	4.00	3.316		ug/L		83	40 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	77		30 - 150
DCB Decachlorobiphenyl	66		30 - 150

Lab Sample ID: LCSD 480-164383/3-A

Matrix: Water

Analysis Batch: 164557

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 164383

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	4.00	3.090		ug/L		77	40 - 140	3	20
PCB-1260	4.00	3.463		ug/L		87	40 - 140	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	82		30 - 150
DCB Decachlorobiphenyl	62		30 - 150

TestAmerica Buffalo

QC Association Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-54095-1

GC Semi VOA

Prep Batch: 164383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-54095-1	WCMW-1 (Filtered)	Total/NA	Water	3510C	
480-54095-2	WCMW-1	Total/NA	Water	3510C	
LCS 480-164383/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-164383/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 480-164383/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 164557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-54095-1	WCMW-1 (Filtered)	Total/NA	Water	8082	164383
480-54095-2	WCMW-1	Total/NA	Water	8082	164383
LCS 480-164383/2-A	Lab Control Sample	Total/NA	Water	8082	164383
LCSD 480-164383/3-A	Lab Control Sample Dup	Total/NA	Water	8082	164383
MB 480-164383/1-A	Method Blank	Total/NA	Water	8082	164383

Lab Chronicle

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-54095-1

Client Sample ID: WCMW-1 (Filtered)

Date Collected: 01/31/14 10:36

Date Received: 02/01/14 00:10

Lab Sample ID: 480-54095-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			164383	02/04/14 08:02	KEB	TAL BUF
Total/NA	Analysis	8082		1	164557	02/05/14 07:45	JMM	TAL BUF

Client Sample ID: WCMW-1

Date Collected: 01/31/14 10:38

Date Received: 02/01/14 00:10

Lab Sample ID: 480-54095-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			164383	02/04/14 08:02	KEB	TAL BUF
Total/NA	Analysis	8082		1	164557	02/05/14 08:01	JMM	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-54095-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	04-01-14
Kentucky (DW)	State Program	4	90029	12-31-14
Kentucky (UST)	State Program	4	30	04-01-14
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14
Minnesota	NELAP	5	036-999-337	12-31-14
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	03-31-14
North Dakota	State Program	8	R-176	03-31-14
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-30-14
Tennessee	State Program	4	TN02970	04-01-14
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
Washington	State Program	10	C784	02-10-14 *
West Virginia DEP	State Program	3	252	03-31-14
Wisconsin	State Program	5	998310390	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Buffalo

Method Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-54095-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (GC/ECD)	MA DEP	TAL BUF

Protocol References:

MA DEP = Massachusetts Department Of Environmental Protection

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Woodard & Curran Inc
Project/Site: Quincy Inervale

TestAmerica Job ID: 480-54095-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-54095-1	WCMW-1 (Filtered)	Water	01/31/14 10:36	02/01/14 00:10
480-54095-2	WCMW-1	Water	01/31/14 10:38	02/01/14 00:10

Login Sample Receipt Checklist

Client: Woodard & Curran Inc

Job Number: 480-54095-1

Login Number: 54095

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client Woodard & Curran	Project Manager Jarrod Yoder, Ryan Smith	Date 1/31/14	Chain of Custody Number 261500
----------------------------	---	-----------------	-----------------------------------

Address	Telephone Number (Area Code)/Fax Number	Lab Number
980 Washington Street, Ste 325N	781-251-0200 wooden@woodruffcurran.com, rdsuith@woodruffcurran.com	Page 1 of 1

City Declina	State MA	Zip Code 02026	Site Contact Ryan Smith	Lab Contact Becky Mason	Analysis (Attach list if more space is needed)
-----------------	-------------	-------------------	----------------------------	----------------------------	--

Project Name and Location (State)	Carrier/Waybill Number	Special Instructions/
Intervale - Quincy, Quincy, MA		

Contract/Purchase Order/Quote No.		Containers &	Special Instructions	Conditions of Receipt
-----------------------------------	--	--------------	----------------------	-----------------------

	Matrix	Containers & Preservatives	77					Conditions of Receipt
--	--------	----------------------------	----	--	--	--	--	-----------------------

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	lit	aqueous	Feed	ball		Inpres	42504	4V03	HCl	NaOH	TnAc/ NaOH		PCB

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

Possible Hazard Identification										Sample Disposal										Retention Period									
<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	<input type="checkbox"/> Return To Client	<input checked="" type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For	Months			(A fee may be assessed if samples are retained longer than 1 month)																		

Turn Around Time Required ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other: 5 day TAT

1. Relinquished By		Date	Time	1. Received By		Date	Time
		1/31/14	1:50 PM			1/31/14	1:50 PM

2. Relinquished By	Date	Time	2. Received By	Date	Time
<i>[Signature]</i>	1-31-14	11:00	<i>[Signature]</i>	2-1-14	11:10

3. Relinquished By	Date	Time	3. Received By	Date	Time

[illegible]

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Age Group	Number of People
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15

APPENDIX D BORING LOGS



PROJECT INFORMATION

SARSS - Quincy

08403-17

BORING NO. MW-1R

C

4111

511

Geologic

DAMIAN JACOBS

Jarrett Everton

OK

MW-1R

Direct Push

Geoprobe

TOC Elevation (feet)

Groundwater Levels

Time

125

100

DEPTH H	SAMPLE INFORMATION					STRATUM / SAMPLE DESCRIPTION	USCS Symbol	REMARKS (e.g., Well Info)
	DEPTH (feet)	Type & No.	BLOWS PER 6 INCHES	PIENETC (inches)	PIV FID			
1			NA	36/48	0.2	medium SAND, trace gravel, trace cobble (broken stone), light brown to dark brown, moist, well graded	SW	
2								
3								
4	4							
5			NA	18/48	1.1	Fine SAND, trace gravel, poorly graded, gray, wet @ 7'	SP	
6								
7								
8	8							7'
9			NA	39/48	0.5	Fine SAND, poorly graded wet gray	SP	
10								
11						4" Peat layer 10-10'4", moist	PT	
12	12					10'4"-12' Coarse SAND, poorly graded, saturated, brown	SP	
13			NA	46/48	0.6	Coarse SAND, poorly graded saturated, brown	SP	
14								
15								
16	16					Boring terminated at 16' Set well at 16'		
20								

Notes: 1) odor not detected unless noted



PROJECT INFORMATION

Project Name

SARSS - Quincy

Project Number

08403-17

BORING NO. MW-2R

SHEET 1 of 1

DATE STARTED 4/11/13

DATE COMPLETED 4/11/13

Boring Co.

Geologic

Boring Location

MW-2R

Driller

Damien Jacobs

Drilling Method

Direct Push

Logged By

Jafratt Everton

Drilling Equipment

Geoprobe

Checked By

DJE

TOC Elevation (feet)

Groundwater Levels		
Date	Time	Depth
4/11/13	13:16	4.65

DEPTH	SAMPLE INFORMATION				STRATUM / SAMPLE DESCRIPTION	USCS Symbol	REMARKS (e.g., Well Info)
	DEPTH (feet)	Type & No.	BLOWS PER 8 INCHES	PEWREC (inches)			
0							
1			NA	36/48	2.3	Fine SAND, some gravel, odor, gray and black, debris, white chips of trash, metal fragment, moist, well graded	SM
2							
3							
4	4						
5			NA	24/48	6.4	Medium SAND and Angular Gravel, wet @ 6'; odor, sheen on water	SP
6							
7							
8	8						
9			NA	24/48	2.3	Fine SAND, some cobbles (broken stone), well graded, saturated, sheen on water, odor, dark brown	SW
10							
11							
12	12						
13							
14							
15							
16							
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Notes: 1) odor not detected unless noted
2)
3)
4)

Well set @ 14'
Boring terminated @ 16'
Native material 14-16'



PROJECT INFORMATION

Project Name

SARSS - Quincy

Project Number

08403-17

BORING NO. MW-3R

SHEET 1 of 1

DATE STARTED 4/11/13

DATE COMPLETED 4/11/13

Boring Co.

Geologic

Boring Location

MW-3R

Driller

Damien Jacobs

Drilling Method

Direct Push

Logged By

Jarrett Everton

Drilling Equipment

Geoprobe

Checked By

TOC Elevation (feet)

Groundwater Levels

Date	Time	Depth
4/11/13	1420	3.99

DEPTH	SAMPLE INFORMATION					STRATUM / SAMPLE DESCRIPTION	USCS Symbol	REMARKS (e.g., Well Info)
	DEPTH (feet)	Type & No.	BLOWS PER 6 INCHES	PEN/REC (inches)	PIC/ FID			
0								
1			NA	30/48	6.7	Fine SAND, little gravel, well graded, brown, moist	SW	
2								
3								
4								
5			NA	12/48	1.4	Medium to coarse SAND and gravel, well graded, wet @ 5' dark brown	SW	▼ @ 5'
6								
7								
8								
9			NA	30/48	0.4	Coarse SAND to Fine SAND and silt, brown to black, no odor, saturated, well graded	SW	
10								
11								
12								
13				12/48	0.8	SAME AS above 4"	SW	
14						4" peat, moist, orange	PT	
15						4" very fine SAND and silt, poorly graded, black and gray	SM	
16								
17								
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20								
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Notes: 1) odor not detected unless noted



PROJECT INFORMATION

Project Name

SARSS - Quincy

Project Number

08403-17

BORING NO. MW-4R

SHEET 1 of 1

DATE STARTED 4/11/13

DATE COMPLETED 4/11/13

Boring Co.

Geologic

Boring Location

MW-4R

Driller

Damien Salobis

Drilling Method

Direct Push

Logged By

Jarrett Everton

Drilling Equipment

Geoprobe

Checked By

BW

TOC Elevation (feet)

Groundwater Levels

Date	Time	Depth
4/11/13	1322	4.04

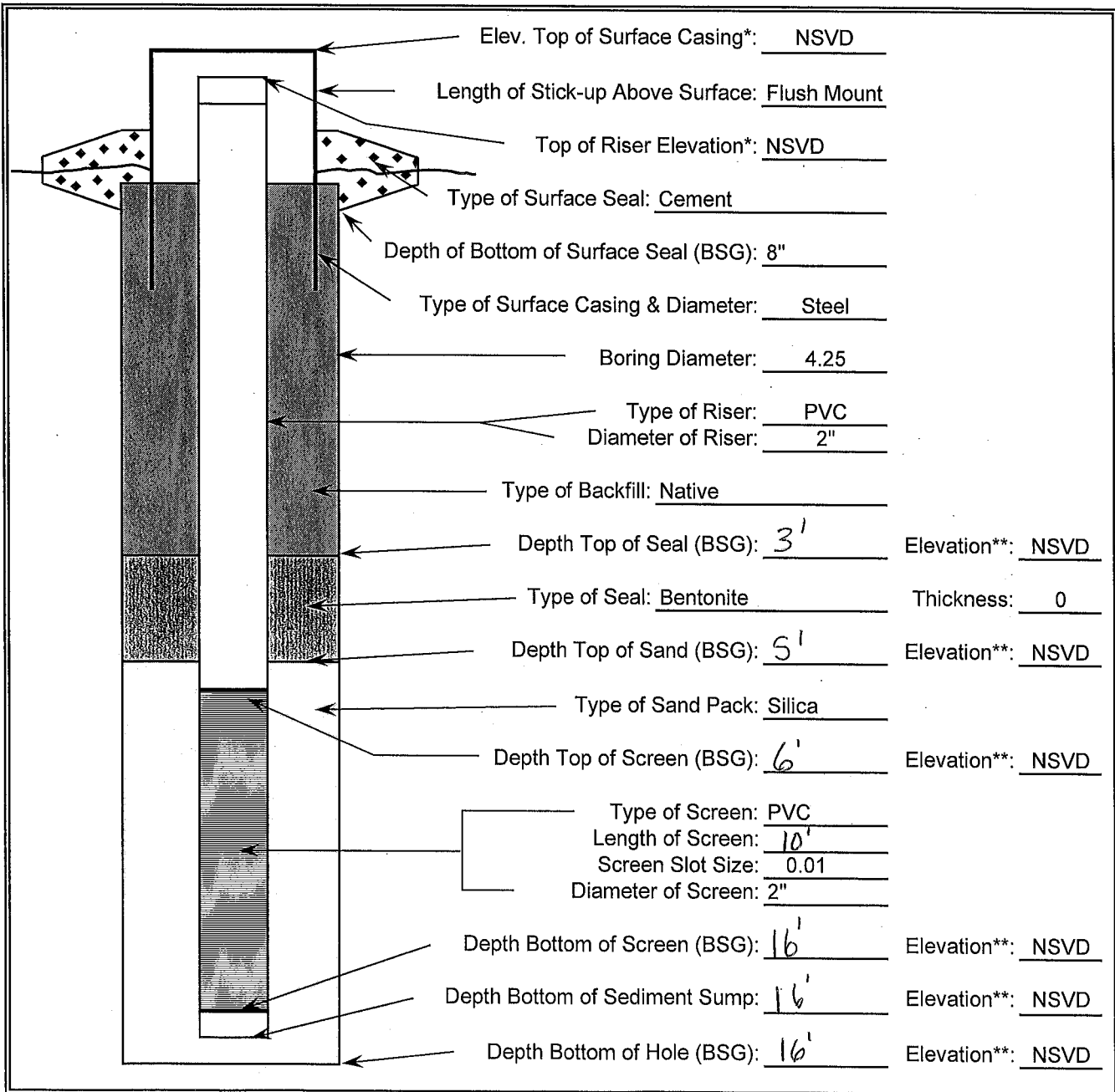
DEPTH	SAMPLE INFORMATION					STRATUM / SAMPLE DESCRIPTION	USCS Symbol	REMARKS (e.g., Well Info)
	DEPTH (feet)	Type & No.	BLOWS PER 6 INCHES	PEN/REC (inches)	PID/FID			
0			NA	26/48	5.0	medium SAND, little gravel, brown with 6" black band AT 22" with odor, moist, well graded.	SM	
1								
2								
3								
4	4		NA	30/48	42.8	Fine SAND, poorly graded, wet @ 5', brown, odor	SM	
5					42.8			
6								
7								
8	8		NA	27/48	2.7	Fine SAND and SILT, poorly sorted, odor black with sheen on water in soil, low plasticity, saturated	SW	Low PID although sheen
9								
10								
11								
12	12		NA	36/48	5.4	6" Coarse SAND, Peat 30" wet poorly graded, moist, odor	SW PT	
13								
14	14							
15								
16	16					SET WELL AT 14' Boring terminated AT 16' Native material 14-16'		
20								

Notes: 1) Odor not detected unless noted
2)
3)
4)

Watermark Environmental As-Built Groundwater Monitoring Well Construction Diagram - Overburden

Project: SARSS Quincy
 Project #: 08403-17
 Date Start: 4/11/2013
 Date End: 4/11/2013
 Logged By: Jarrett Everton
 Boring ID: MW-1R

Location: 175 Intervale St.
 Drilling Company: Geologic
 Drilling Method: Direct Push
 Drilling Foreman: Damien Jacobs
 Checked By: *DW*



BSG = Feet Below Surface Grade

* = Surveyed elevation

** = Elevation calculated based on surveyed ground surface elevation

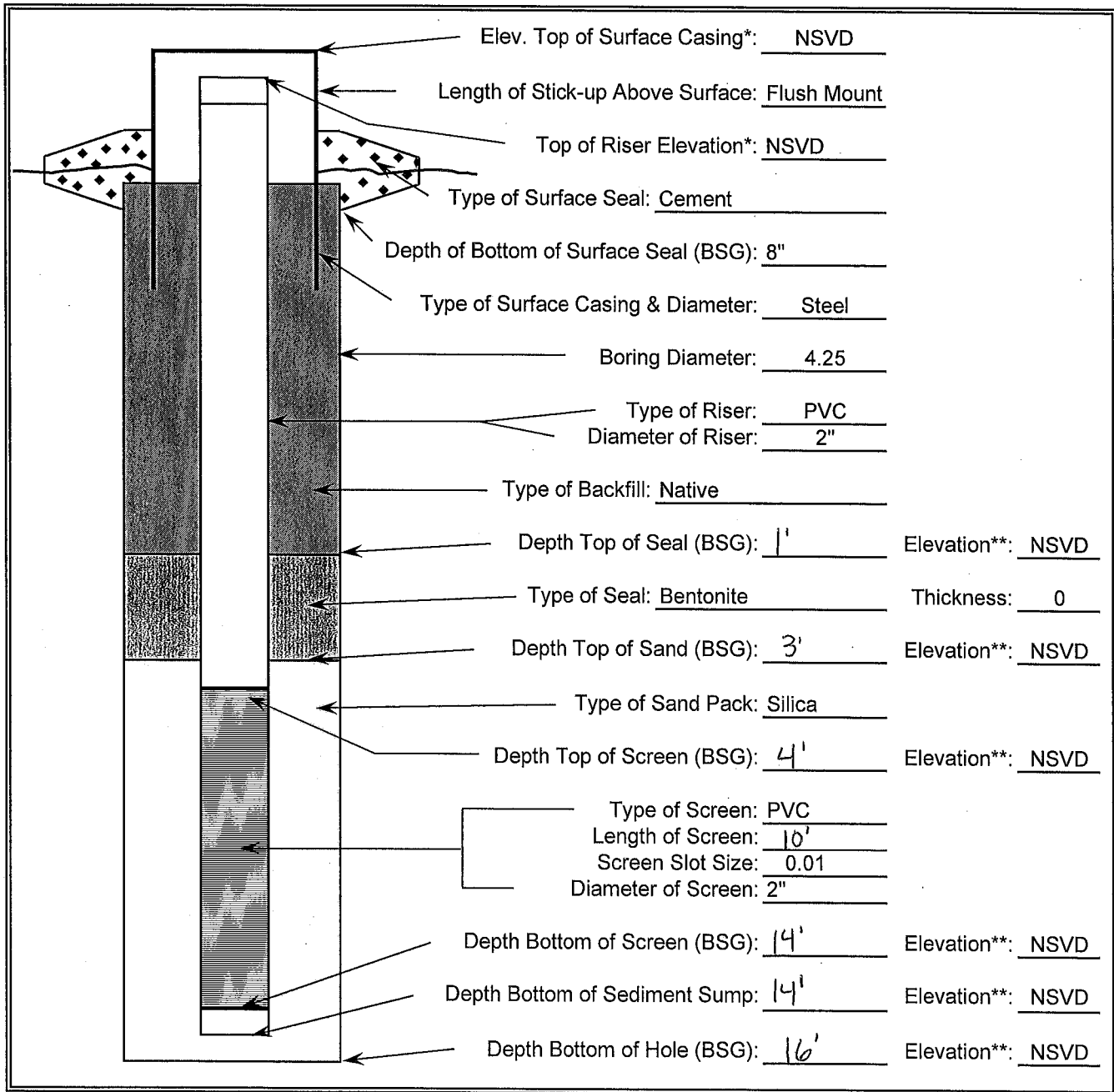
NSVD=Not Surveyed

WELL ID: MW- 2RGround Surface Elevation*: NSVD

Watermark Environmental
As-Built Groundwater Monitoring Well Construction Diagram - Overburden

Project: SARSS Quincy
Project #: 08403-17
Date Start: 4/11/2013
Date End: 4/11/2013
Logged By: Jarrett Everton
Boring ID: MW- 2R

Location: 175 Intervale St.
Drilling Company: Geologic
Drilling Method: Direct Push
Drilling Foreman: Damien Jacobs
Checked By: DAJ



BSG = Feet Below Surface Grade

* = Surveyed elevation

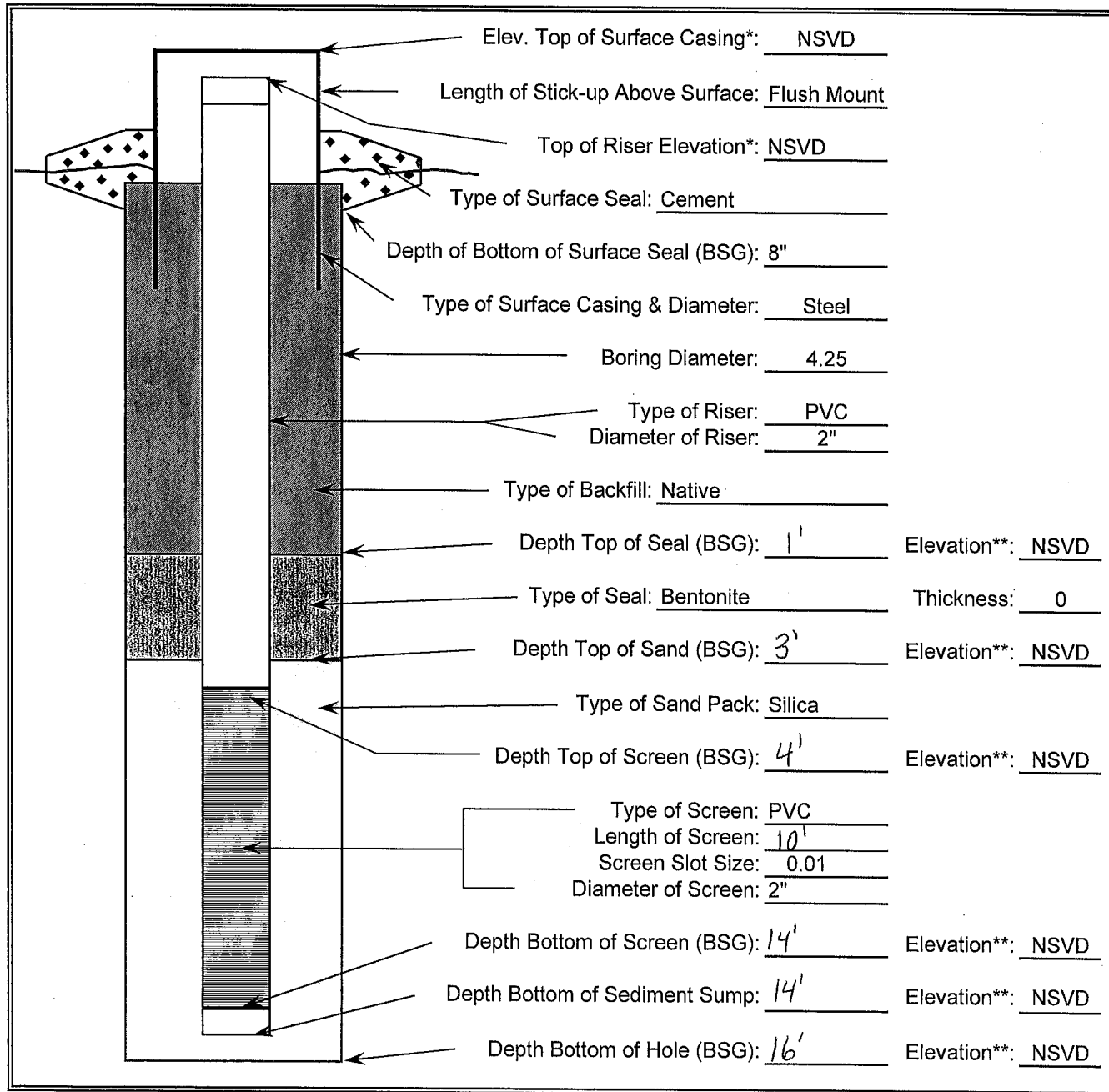
** = Elevation calculated based on surveyed ground surface elevation

NSVD=Not Surveyed

Watermark Environmental As-Built Groundwater Monitoring Well Construction Diagram - Overburden

Project: SARSS Quincy
 Project #: 08403-17
 Date Start: 4/11/2013
 Date End: 4/11/2013
 Logged By: Jarrett Everton
 Boring ID: MW-3R

Location: 175 Intervale St.
 Drilling Company: Geologic
 Drilling Method: Direct Push
 Drilling Foreman: Damien Jacobs
 Checked By: OW



BSG = Feet Below Surface Grade

* = Surveyed elevation

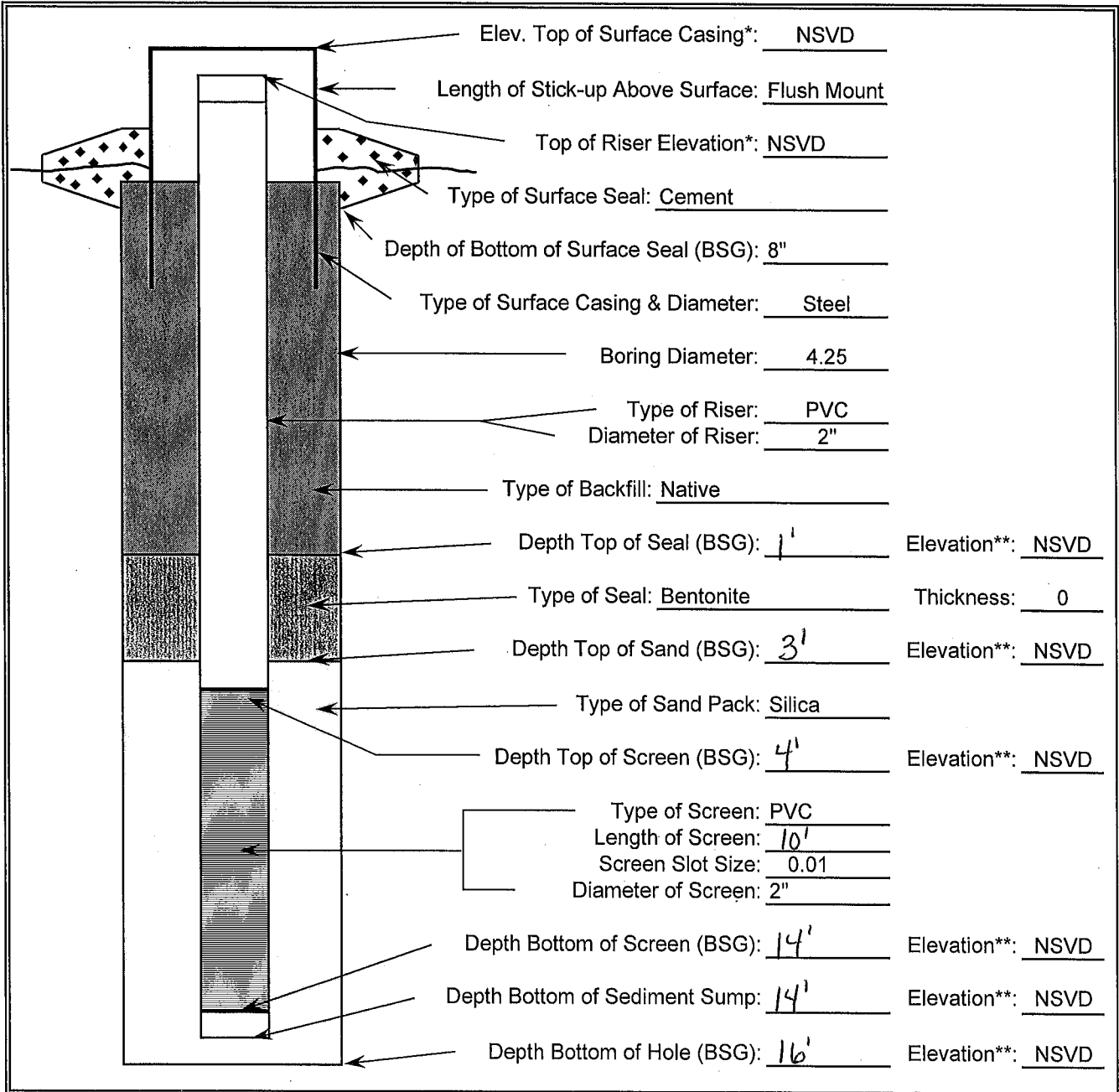
** = Elevation calculated based on surveyed ground surface elevation

NSVD=Not Surveyed

Watermark Environmental
As-Built Groundwater Monitoring Well Construction Diagram - Overburden

Project: SARSS Quincy
 Project #: 08403-17
 Date Start: 4/11/2013
 Date End: 4/11/2013
 Logged By: Jarrett Everton
 Boring ID: MW- 4R

Location: 175 Intervale St.
 Drilling Company: Geologic
 Drilling Method: Direct Push
 Drilling Foreman: Damien Jacobs
 Checked By: *DW*



BSG = Feet Below Surface Grade

* = Surveyed elevation

** = Elevation calculated based on surveyed ground surface elevation

NSVD=Not Surveyed



Woodard & Curran
980 Washington Street
Dedham, MA 02026
Telephone: 781-251-0200

WELL NUMBER WCSB-1/ WCMW-1

PAGE 1 OF 1

CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>9/26/13</u> COMPLETED <u>9/26/13</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Hollow stemmed auger</u>	▽ AT TIME OF DRILLING <u>7.00 ft</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

WOODARD & CURRAN STANDARD - WC STD.GDT - 3/5/14 12:09 - I:\ANDOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SUBSURFACE SAMPLING\BORING LOGS.GPJ

DEPTH (ft)	RECOVERY %	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0						Standpipe (4.20' above ground)
1.0	38	5-6-5-5 (11)		Brown, dry, loose, coarse to fine SAND, little gravel	PID = 1ppmv	Native Fill
2.0				Black with yellow, dry, loose, FILL (coal and/or tar-like material) Note: WCSB-1 (1-2) collected for PCBs, VOCs, EPH	PID = 14.1ppmv	Bentonite Seal
4.0	71	2-2-2-2 (4)		Orange, moist to wet, moderately dense, sticky, SILT, some medium to fine sand Note: WCSB-1 (2.5-3) collected for PCBs, VOCs, MCP 14 Metals, EPH	PID = 0.7ppmv	Schedule 40 2" PVC Riser
6.0	0	2-1-1-1 (2)		Minimal recovery Note: Fill observed (glass)	PID = 0.6ppmv	
8.0	58	3-2-1-1 (3)		Gray, saturated, loose, sticky, SILT, little coarse to fine sand	PID = 1ppmv	
7.3				Black, wet, moderately dense, coarse SAND, some medium to fine sand	PID = 2.6ppmv	
8.0				Note: Fill observed (Coal/ tar) WCSB-1 (7-8) collected for PCBs, VOCs, EPH	PID = 0.5ppmv	Sand Filter Pack
10.0	75	2-2-3-4 (5)		Brown, wet, moderately loose, coarse to fine SAND Note: Increasing amount of coarse sand with depth	PID = 0.5ppmv	2" PVC Screen
12.0	67	2-5-6-5 (11)		Brown, wet, moderately dense, coarse to fine SAND	PID = 0.2ppmv	
14.0	100	9-7-9-7 (16)		Gray, wet, dense, medium to fine SAND, little silt	PID = 0.3ppmv	
14.0					PID = 0.6ppmv	
					PID = 0.3ppmv	

Bottom of borehole at 14.0 feet.



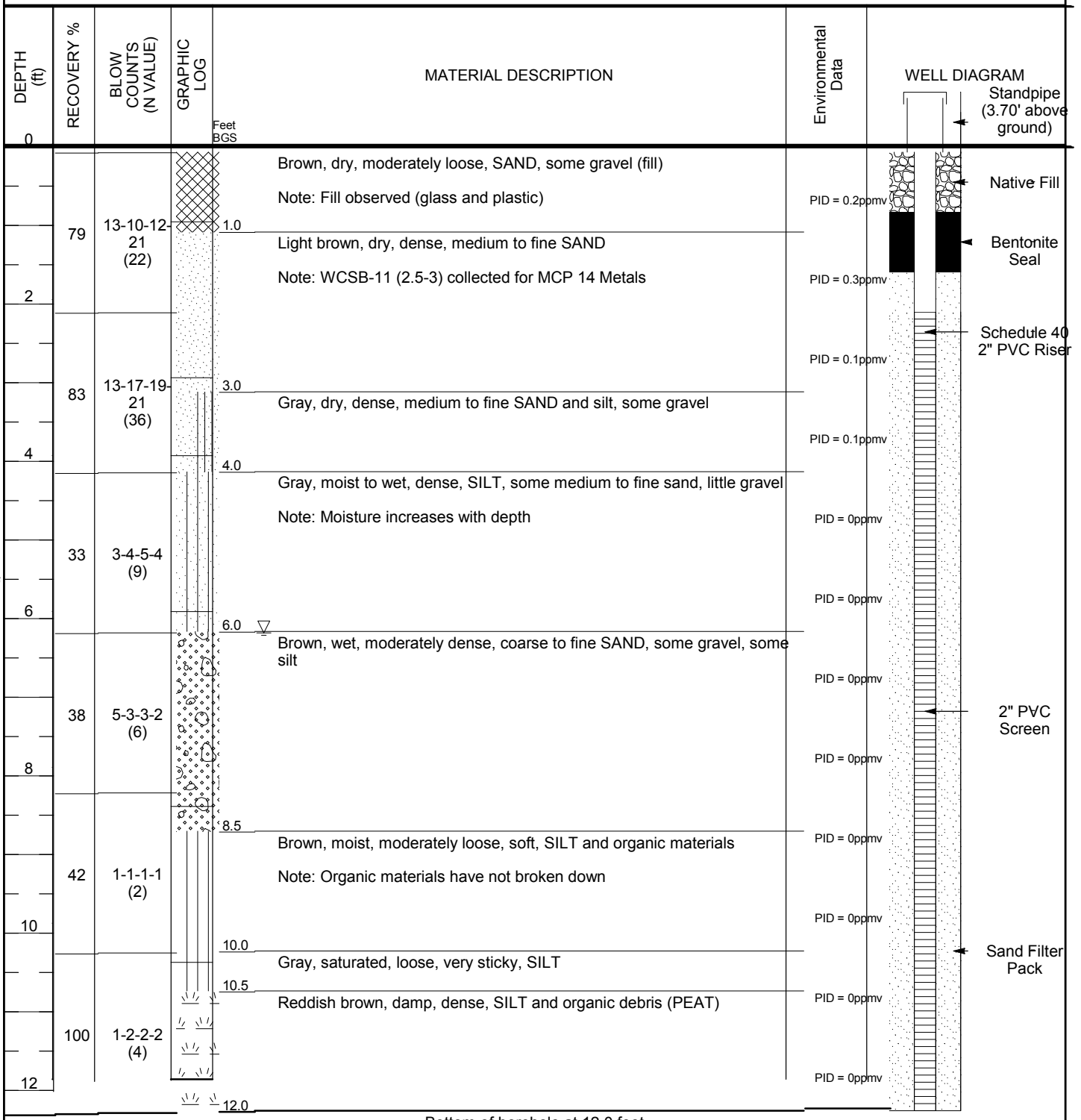
Woodard & Curran
980 Washington Street
Dedham, MA 02026
Telephone: 781-251-0200

WELL NUMBER WCSB-10/ WCMW-10


PAGE 1 OF 1

CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	9/26/13	COMPLETED	9/26/13
GROUND ELEVATION		HOLE SIZE	2.0"
DRILLING CONTRACTOR	Technical Drilling Services	GROUND WATER LEVELS:	
DRILLING METHOD	Hollow stemmed auger	AT TIME OF DRILLING	6.00 ft
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
AT END OF DRILLING	---		
NOTES	AFTER DRILLING ---		

WOODARD & CURRAN STANDARD - WC STD.GDT - 3/5/14 12:09 - I:\ANDOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SUBSURFACE SAMPLING\BORING LOGS\BORING LOGS.GPJ



Bottom of borehole at 12.0 feet.

CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>9/25/13</u> COMPLETED <u>9/25/13</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Hollow stemmed auger</u>	 AT TIME OF DRILLING <u>7.00 ft</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES <u>Second sampling event completed with Geoprobe on 11/22/2013.</u>	AFTER DRILLING <u>---</u>

NOTES		Second sampling event completed with Geoprobe on 11/22/2013.		AFTER DRILLING		---	
DEPTH (ft)	RECOVERY %	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM	
0						Flush Mounted Roadbox	
1.5	100	11-11-14-11 (25)		Brown, dry, moderately loose, SAND, little gravel, trace organic debris at surface Note: WCSB-11 (1-2) collected for VOCs, EPHs, VPHs on 9/25/2013 Elevated PID (221.7 ppm) reading during 11/22/2013 sampling	PID = 0.6ppmv	Native Fill	
2				Blackish brown, dry, moderately loose, medium to fine SAND, some gravel Note: WCSB-11 (2.5-3) collected for PCBs, MCP 14 Metals on 9/25/2013	PID = 0.8ppmv		
4	25	14-14-9-12 (23)			PID = 0.5ppmv	Bentonite Seal	
4.0				Dark brown, damp to moist, SAND, little silt, trace gravel Note: WCSB-11 (6-7) collected fro MCP Metals and PCBs	PID = 0.5ppmv		
6	17	12-14-19-11 (33)			PID = 0.6ppmv	Schedule 40 2" PVC Riser	
					PID = 0.5ppmv		
8	29	8-2-3-3 (5)		Dark brown to gray, moderately dense (soft), SAND and silt	PID = 0.6ppmv		
8.0				Gray, wet, dense, coarse to fine SAND, little silt	PID = 0.4ppmv		
10	46	2-2-2-1 (4)			PID = 0ppmv	Sand Filter Pack	
					PID = 0ppmv		
12	63	1-1-2-1 (3)			PID = 0ppmv	2" PVC Screen	
					PID = 0.1ppmv		
14	96	2-4-12-11 (16)		Light brown, saturated, loose, fine SAND and gravel, some silt	PID = 0ppmv		
					PID = 0ppmv		
16	75	2-2-3-4 (5)		Brown, wet, moderately dense, coarse SAND, some medium to fine sand	PID = 0ppmv		
					PID = 0ppmv		

Bottom of borehole at 16.0 feet.









Woodard & Curran
980 Washington Street
Dedham, MA 02026
Telephone: 781-251-0200

BORING NUMBER WCSB-12

PAGE 1 OF 1

CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>11/22/13</u> COMPLETED <u>11/22/13</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>GeoProbe</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

WOODARD & CURRAN STANDARD - WC STD.GDT - 3/5/14 12:10 - I:\ANDOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SUBSURFACE SAMPLING\BORING LOGS.GPJ

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
2	30		FILL (Glass and brick observed) Note: WCSB-12 (2.5-3) collected for VOCs and PCBs	PID = 77.5ppmv
4			4.0 Gray, sandy FILL	PID = 0ppmv
6			5.5 Orange, SILT and sand	PID = 22.4ppmv
			6.0 Note: WCSB-12 (5.5-6) collected for PCBs Gray, coarse to fine SAND	PID = 0ppmv
8	65		8.0 Black to dark brown, dense, SILT	PID = 0ppmv
10			10.0	






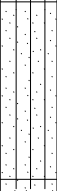

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BORING NUMBER WCSB-13

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CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>11/22/13</u> COMPLETED <u>11/22/13</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>GeoProbe</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
2	30		Brown, sandy FILL (Brick debris observed)	
4			Orange, silty FILL Note: WCSB-13 (2.5-3) collected for PCBs	PID = 3ppmv
6			Orange, dense, SILT	PID = 0ppmv
8	65		Black, SILT and organics Note: WCSB-13 (7-8) collected for PCBs	PID = 0ppmv
10			Reddish brown, PEAT	PID = 0ppmv

Bottom of borehole at 10.0 feet.






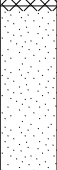
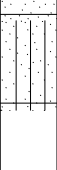


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BORING NUMBER WCSB-14

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CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>11/22/13</u> COMPLETED <u>11/22/13</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>GeoProbe</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
2	60		Black FILL (glass and coal observed)	PID = 0ppmv
4			Brown, coarse to fine SAND	PID = 0ppmv
6			Brown, dense, SILT and sand	PID = 0ppmv
8	30		Gray, SILT with sheen	PID = 29.5ppmv
10			Note: WCSB-14 (7-8) collected for EPH and VOCs Gray, wet, GRAVEL	PID = 0ppmv
10.0				

Bottom of borehole at 10.0 feet.





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BORING NUMBER WCSB-15

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CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>11/22/13</u> COMPLETED <u>11/22/13</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>GeoProbe</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

WOODARD & CURRAN STANDARD - WC STD.GDT - 3/5/14 12:11 - I:\ANDOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SUBSURFACE SAMPLING\BORING LOGS.GPJ

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
			Brown, FILL Note: WCSB-15 (0.5-1.5) collected for VOCs	PID = 85.4ppmv
2	43	2.0	Brown, sandy FILL Notes: WCSB-15 (2.5-3) collected for PCBs	PID = 0.8ppmv
4		4.0	Gray, SAND and granite debris	PID = 0ppmv
		5.0	Gray, wet, coarse to fine SAND Note: WCSB-15 (6-7) collected for PCBs	PID = 0ppmv
6				
8	40	7.5	Gray, wet, SAND and gravel	PID = 0ppmv
10		10.0		

Bottom of borehole at 10.0 feet.





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BORING NUMBER WCSB-16

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CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>11/22/13</u> COMPLETED <u>11/22/13</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>GeoProbe</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
			TOPSOIL	PID = 0ppmv
2	40		2.0 Brown, coarse to fine SAND	PID = 0ppmv
4			3.5 Light brown, medium to fine SAND	PID = 0ppmv
6			5.0 Gray, wet, SILT Note: WCSB-16 (6-7) collected for VOCs	PID = 0ppmv
8	72		See embedded photograph	PID = 0ppmv
10			10.0	

Bottom of borehole at 10.0 feet.





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BORING NUMBER WCSB-17

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CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>11/22/13</u> COMPLETED <u>11/22/13</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>GeoProbe</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
2	27		See embedded photograph	
4			Black, SAND and coal/tar Note: WCSB-17 (2.5-3) collected for EPH and PCBs	PID = 4.3ppmv
6			Gray, SAND and granite debris Note: WCSB-17 (4-5) collected for PCBs	PID = 0ppmv
8	5		Gray, wet, GRAVEL and sand	PID = 0ppmv
10				

Bottom of borehole at 10.0 feet.







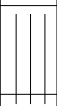
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BORING NUMBER WCSB-18

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CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>11/22/13</u> COMPLETED <u>11/22/13</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>GeoProbe</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
2	33		Dark brown, sandy FILL Note: WCSB-18 (2.5-3) collected for PCBs	PID = 0ppmv
4			Gray, SAND and granite debris	PID = 0ppmv
6			See embedded photograph	
8	33		Gray, wet, SILT Note: WCSB-18 (7-8) collected for PCBs	PID = 0ppmv
10			See embedded photograph	
10.0				

Bottom of borehole at 10.0 feet.





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BORING NUMBER WCSB-19

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CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>11/22/13</u> COMPLETED <u>11/22/13</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>GeoProbe</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

WOODARD & CURRAN STANDARD - WC STD.GDT - 3/5/14 12:12 - I:\ANDOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SUBSURFACE SAMPLING\BORING LOGS.GPJ

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
2	53		SAND (former building footprint) Note: WCSB-19 (2.5-3) collected for EPH and PCBs	PID = 0ppmv
4		4.0	See embedded photograph	PID = 0ppmv
6		6.0	SAND and granite debris Note: WCSB-19 (6-7) collected EPH and PCBs	PID = 0ppmv
8	23			PID = 0ppmv
10		10.0		

Bottom of borehole at 10.0 feet.





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WELL NUMBER WCSB-2/ WCMW-2

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	9/26/13	COMPLETED	9/26/13
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	Hollow stemmed auger	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES			
GROUND WATER LEVELS:		AT TIME OF DRILLING 7.00 ft	
		AT END OF DRILLING ---	
		AFTER DRILLING ---	

WOODARD & CURRAN STANDARD - WC STD.GDT - 3/5/14 12:12 - I:\ANDOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SUBSURFACE SAMPLING\BORING LOGS.GPJ

DEPTH (ft)	RECOVERY %	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0						Flush Mounted Roadbox
2	67	6-11-16-26 (27)		Brown, dry, moderately loose, medium to fine SAND, some gravel (granite debris)	PID = 0.1ppmv	Native Fill
4	54	18-10-12-18 (22)		4.0	PID = 0.3ppmv	
6	38	20-10-12-8 (22)		Brown, moist, moderately loose, medium to fine SAND, little gravel (granite debris)	PID = 0.1ppmv	Bentonite Seal
8	33	7-5-6-6 (11)		8.0	PID = 0.1ppmv	Schedule 40 2" PVC Riser
10	13	8-5-5-5 (10)		Brown, saturated, very loose, coarse to fine SAND and gravel, trace silt	PID = 0ppmv	
12	42	8-8-6-6 (14)		10.0	PID = 0ppmv	
14	50	13-9-8-5 (17)		Gray, saturated, moderately loose, coarse to fine SAND, little gravel	PID = 0.1ppmv	
16	75	9-2-3-3 (5)		13.0	PID = 0.4ppmv	
18	58	3-3-3-3 (6)		Gray, saturated, loose, SILT, little fine sand, trace coarse sand	PID = 0.3ppmv	
20	100	4-2-2-2 (4)		14.0	PID = 0.1ppmv	Sand Filter Pack 2" PVC Screen
22	58	1-2-2-3 (4)		Note: WCSB-2 (14-15) collected for VOCs Lenses (<1") of black and reddish silty organic material at 15.75'	PID = 0.7ppmv	
24	100	3-3-3-2 (6)		16.0	PID = 0.6ppmv	
				Gray, saturated, very loose, very sticky, SILT and coarse sand, trace gravel	PID = 0.2ppmv	
				18.0	PID = 0.2ppmv	
				19.0	PID = 0.1ppmv	
				Reddish brown, moist, dense, SILT and organic debris (PEAT)	PID = 0.2ppmv	
				21.0	PID = 0.2ppmv	
				23.0	PID = 0.1ppmv	
				Brown, damp, dense, fine SAND and silt	PID = 0.3ppmv	
				24.0	PID = 0.2ppmv	

Bottom of borehole at 24.0 feet.



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BORING NUMBER WCSB-20

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	11/22/13	COMPLETED	11/22/13
GROUND ELEVATION		HOLE SIZE	2.0"
DRILLING CONTRACTOR	Technical Drilling Services	GROUND WATER LEVELS:	
DRILLING METHOD	GeoProbe	AT TIME OF DRILLING	8.00 ft
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
AT END OF DRILLING	---	AFTER DRILLING	---
NOTES			

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
2	20		Light brown, moist, moderately loose, medium to fine SAND	
4			Gray, dry, moderately loose, SAND and granite debris	PID = 3ppmv
6			Gray and black, moist to wet, coarse to fine SAND and gravel	
8	23		Note: Black staining observed throughout interval. Moisture increases with depth. Increasingly sticky/ silty at depth with noticeable odor. WCSB-20 (14-15) collected for EPH and PCBs	PID = 0.3ppmv
10				PID = 0.3ppmv
12	40			PID = 18.4ppmv
14				PID = 2.4ppmv
16			Reddish brown, moist, dense, SILT and fine sand (PEAT)	
18	100		Note: WCSB-20 (16-17) collected for EPH, VOCs and PCBs	PID = 46.1ppmv
20			Light brown, moist, moderately dense, coarse to fine SAND	PID = 27.5ppmv
22			Gray, wet, moderately dense, coarse to fine SAND, some silt	PID = 4.5ppmv
24				

Bottom of borehole at 20.0 feet.



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BORING NUMBER WCSB-21

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	11/22/13	COMPLETED	11/22/13
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES			
GROUND WATER LEVELS:			
AT TIME OF DRILLING		---	
AT END OF DRILLING		---	
AFTER DRILLING		---	

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
2	40		SAND and granite debris	PID = 5.1ppmv
4			See embedded photograph Note: WCSB-21 (2.5-3) collected for EPH and PCBs	PID = 3.3ppmv
6			Gray orange, sticky, SILT	PID = 0ppmv
8	40		Black, SILT and organics	PID = 0ppmv
10				PID = 0ppmv

Bottom of borehole at 10.0 feet.





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BORING NUMBER WCSB-22

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	11/22/13	COMPLETED	11/22/13
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES			
GROUND WATER LEVELS:		AT TIME OF DRILLING ---	
		AT END OF DRILLING ---	
		AFTER DRILLING ---	

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0			Feet BGS	
2	37		See embedded photograph Note: WCSB-22 (2.5-3) collected for EPH and PCBs	PID = 0.4ppmv
4		4.0	Orange, SILT and sand Note: WCSB-22 (4.5-5) collected for EPH and PCBs	PID = 18.4ppmv
6			See embedded photograph	PID = 4.3ppmv
8	7			
10		10.0		

Bottom of borehole at 10.0 feet.





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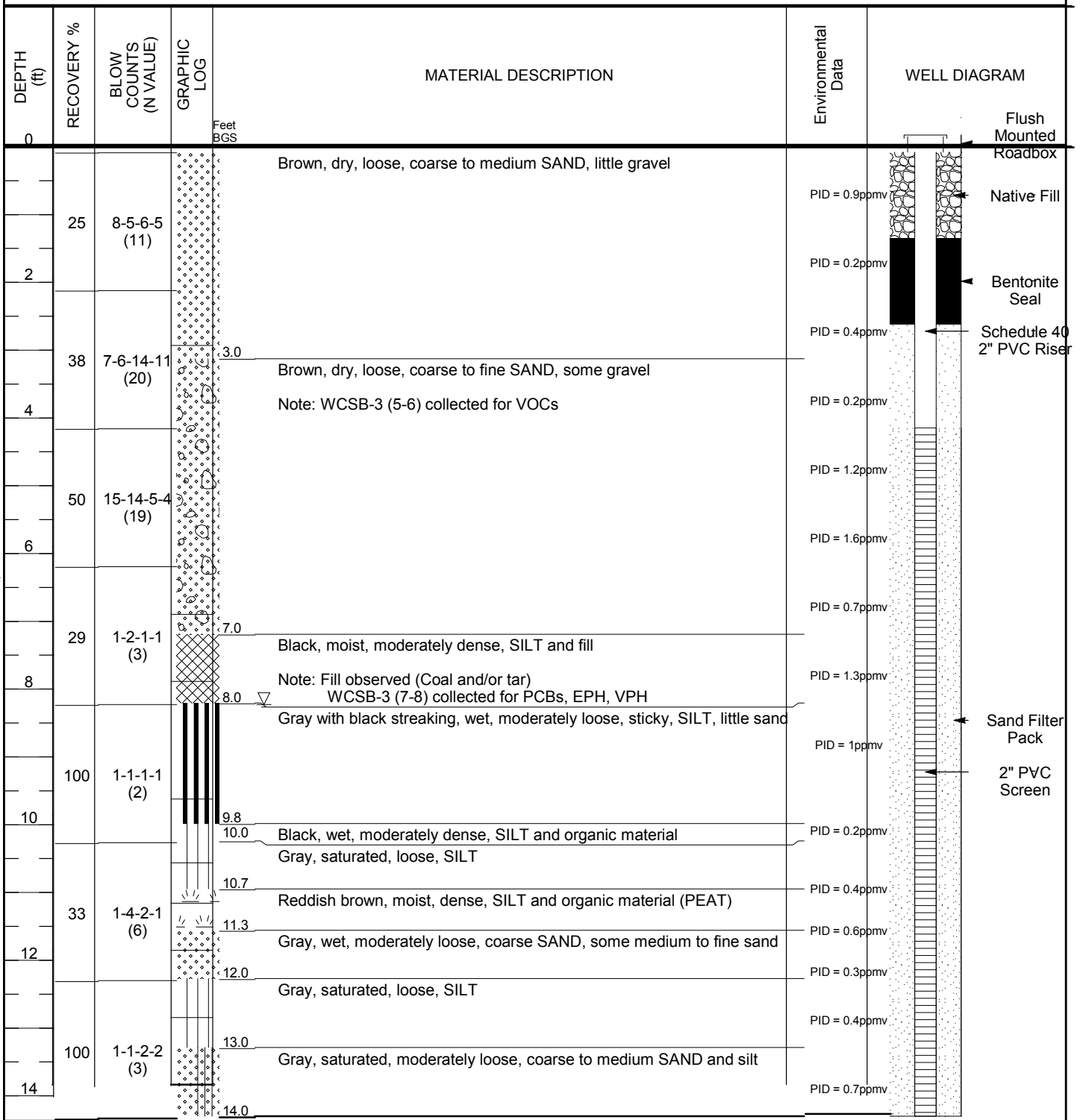
WELL NUMBER WCSB-3/ WCMW-3

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	9/26/13	COMPLETED	9/26/13
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	Hollow stemmed auger	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	Refusal encountered (concrete floor) at ~4' bgs in original location.		
GROUND WATER LEVELS:		AT TIME OF DRILLING	
		8.00 ft	
		AT END OF DRILLING	

		AFTER DRILLING	

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Bottom of borehole at 14.0 feet.

CLIENT City of Quincy

PROJECT NAME 175 & 189 Intervale Street

PROJECT NUMBER 226332.01

PROJECT LOCATION Quincy, MA

DATE STARTED 9/26/13 **COMPLETED** 9/26/13

GROUND ELEVATION _____ HOLE SIZE 2.0"

DRILLING CONTRACTOR Technical Drilling Services

GROUND WATER LEVELS:

DRILLING METHOD Hollow stemmed auger

 AT TIME OF DRILLING 5.50 ft

LOGGED BY Ryan Smith **CHECKED BY** Jarrod Yoder

AT END OF DRILLING ---

NOTES Second sampling event completed with Geoprobe on 11/22/2013.

AFTER DRILLING _____

DEPTH (ft)	RECOVERY %	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0						Standpipe (4.15' above ground)
67		4-5-6-11 (11)		Gray, dry, moderately loose, medium to fine SAND, trace gravel Note: WCSB-4 (1-2) collected for VOCs on 11/22/2013 Elevated PID (359.3 ppm) reading during 11/22/2013 sampling event	PID = 4.2ppmv	Native Fill
2					PID = 1.5ppmv	Bentonite Seal
50		6-2-1-2 (3)		Orange, moist to wet, coarse to medium SAND, little silt Note: Fill observed (coal and/or asphalt) WCSB-4 (2.5-3) collected for VOCs, PCBs, MCP 14 Metals, EPH, VPH on 9/26/2013	PID = 6.4ppmv	Schedule 40 2" PVC Riser
4				Gray, wet, moderately dense, SILT, little fine sand, little woody debris	PID = 0.5ppmv	
100		1-1-1-1 (2)		Gray with orange, wet, moderately dense, SILT, some medium to fine sand	PID = 0.5ppmv	
6					PID = 0.6ppmv	
100		5-1-1-1 (2)		Black, wet, moderately dense, SILT, little sand, little organic debris Note: WCSB-4 (6-7) collected for VOCs, PCBs, EPH on 9/26/2013 WCSB-4 (7-8) collected for Metals on 11/22/2013	PID = 1.8ppmv PID = 0.9ppmv	2" PVC Screen
8					PID = 0ppmv	
100		3-4-4-8 (8)		Reddish brown, wet, dense, SILT, little fine sand (PEAT) Saturated, brown, moderately dense, coarse to fine SAND, little silt	PID = 0.1ppmv	Sand Filter Pack
10					PID = 0.1ppmv	
75		4-3-4-7 (7)			PID = 0ppmv	
12					PID = 0ppmv	

~~Bottom of borehole at 12.0 feet.~~



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WELL NUMBER WCSB-5/ WCMW-5

PAGE 1 OF 1

CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>9/25/13</u> COMPLETED <u>9/25/13</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Hollow stemmed auger</u>	<u>▽ AT TIME OF DRILLING</u> <u>7.00 ft</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

WOODARD & CURRAN STANDARD - WC STD. GDT - 3/5/14 12:15 - I:\ANOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SURFACE SAMPLING\BORING LOGS.GPJ

DEPTH (ft)	RECOVERY %	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0						Standpipe (3.60' above ground)
1.5	75	9-11-13-6 (24)		Black, dry, moderately loose, coarse to medium SAND, some gravel Note: WCSB-5 (0.5-1.5) collected for PCBs, VOCs, EPH	PID = 73.8ppmv	
2				Brown, dry, moderately loose, coarse to medium SAND and gravel Note: WCSB-5 (2.5-3) collected for PCBs, MCP 14 Metals	PID = 9.5ppmv	Native Fill
4	50	5-6-4-4 (10)			PID = 8.9ppmv	
5					PID = 0.9ppmv	
5.5					PID = 20.1ppmv	Bentonite Seal
6	33	5-10-14-5 (24)		Dark brown, wet, moderately loose, SILT, little coarse to fine sand, trace gravel Dark brown, saturated, loose, coarse to medium SAND and gravel, little silt	PID = 51.8ppmv	
7					PID = 16.8ppmv	Schedule 40 2" PVC Riser
7.5	25	6-6-4-5 (10)		Note: WCSB-5 (5-6) collected for VOCs, EPH, VPH Gray, saturated, loose, coarse SAND and gravel, little medium to fine sand	PID = 4.2ppmv	
9.5	50	6-3-3-7 (6)			PID = 3.7ppmv	
10					PID = 0ppmv	
11.5	42	4-3-3-2 (6)		Grayish dark brown, wet, moderately dense, SILT, little medium to fine sand, trace coarse sand Gray, saturated, loose, coarse SAND, little medium to fine sand	PID = 0ppmv	
12					PID = 5.1ppmv	
12.5					PID = 3.9ppmv	
13	83	2-1-1-2 (2)		Gray, saturated, loose, coarse SAND, some medium to fine sand Reddish brown, moist, dense, SILT, little fine sand (PEAT)	PID = 0ppmv	
15.5	50	1-1-2-5 (3)			PID = 0ppmv	Sand Filter Pack
16					PID = 0ppmv	
16.5					PID = 0ppmv	
17	75	2-2-2-2 (4)		Brownish gray, moist, dense, SILT and fine sand (firm, sticky) Light gray, moist, dense, SILT and fine sand	PID = 0ppmv	2" PVC Screen
18					PID = 0.1ppmv	
18.5					PID = 0.1ppmv	
20	100	1-1-1-1 (2)		Light gray, wet, dense, SILT and fine sand	PID = 0ppmv	
22	100	1-1-1-1 (2)		Light gray, moist, dense, SILT and fine sand (very sticky)	PID = 0ppmv	
23					PID = 0ppmv	
23.5					PID = 0ppmv	
24	100	6-9-7-6 (16)		Gray, wet, moderately loose, coarse SAND, some silt, little medium to fine sand	PID = 0ppmv	
24.0						

Bottom of borehole at 24.0 feet.



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WELL NUMBER WCSB-6/ WCMW-6

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CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>9/25/13</u> COMPLETED <u>9/25/13</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>Hollow stemmed auger</u>	<u>▽ AT TIME OF DRILLING</u> <u>5.00 ft</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES _____	AFTER DRILLING <u>---</u>

WOODARD & CURRAN STANDARD - WC STD.GDT - 3/5/14 12:15 - I:\ANDOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SUBSURFACE SAMPLING\BORING LOGS\BORING LOGS.GPJ

DEPTH (ft)	RECOVERY %	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0				Feet BGS		
				Brown, dry, moderately loose, SAND and gravel		
				Note: Organic debris at surface	PID = 0ppmv	Standpipe (3.45' above ground)
2	83	2-3-9-7 (12)			PID = 0ppmv	Native Fill
				2.0 Brown, dry, moderately loose, coarse SAND and gravel	PID = 0ppmv	
				Note: WCSB-6 (2.5-3) collected for PCBs, MCP 14 Metals	PID = 0ppmv	
4	75	11-9-6-7 (15)		3.0 Orangish brown, damp, moderately loos, medium to fine SAND, some gravel	PID = 0.8ppmv	Bentonite Seal
				4.0 Orangish brown, damp, moderately dense, medium to fine SAND, little gravel, little silt	PID = 3.7ppmv	
6	33	2-2-2-2 (4)		5.0 Note: WCSB-6 (4-5) collected for VOCs	PID = 0ppmv	Schedule 40 2" PVC Riser
				6.0 Brown, wet, moderately dense, coarse SAND, little silt	PID = 0.4ppmv	
8	29	4-5-7-5 (12)		8.0 Brownish gray, wet, moderately loose, SILT, some coarse sand, little fine sand	PID = 0ppmv	
				8.8 Black, wet, moderately dense, SILT and coarse sand	PID = 2.2ppmv	
10	75	3-2-1-1 (3)		9.0 Note: WCSB-6 (8-9) collected for VOCs, EPH, VPH	PID = 0.1ppmv	
				10.0 Brown, wet, dense, coarse SAND		
				10.0 Reddish brown, moist, dense, SILT, little medium to fine sand (PEAT)		
12	25	1-1-1-1 (2)		10.0 Black, saturated, loose, SILT and gravel	PID = 1.8ppmv	Sand Filter Pack
				12.0 Reddish brown, moist, dense, SILT, little sand (PEAT)	PID = 1.3ppmv	2" PVC Screen
14	100	1-1-2-1 (3)		13.0 Brown, moist, dense, SILT and fine sand	PID = 0ppmv	
				15.0 Light gray, wet, moderately loose, sticky, SILT, some medium to fine sand	PID = 0ppmv	
16	100	1-1-1-1 (2)		16.0	PID = 0ppmv	

Bottom of borehole at 16.0 feet.



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WELL NUMBER WCSB-7/ WCMW-7

PAGE 1 OF 1

CLIENT City of Quincy **PROJECT NAME** 175 & 189 Intervale Street
PROJECT NUMBER 226332.01 **PROJECT LOCATION** Quincy, MA
DATE STARTED 9/25/13 **COMPLETED** 9/25/13 **GROUND ELEVATION** **HOLE SIZE** 2.0"
DRILLING CONTRACTOR Technical Drilling Services **GROUND WATER LEVELS:**
DRILLING METHOD Hollow stemmed auger **AT TIME OF DRILLING** 13.00 ft
LOGGED BY Ryan Smith **CHECKED BY** Jarrod Yoder **AT END OF DRILLING** ---
NOTES Second sampling event completed with Geoprobe on 11/22/2013. **AFTER DRILLING** ---

WOODARD & CURRAN STANDARD - WC STD.GDT - 3/5/14 12:16 - I:\ANOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SUBSURFACE SAMPLING\BORING LOGS\BORING LOGS.GPJ

DEPTH (ft)	RECOVERY %	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0						Flush
0	50	15-16-10-15 (26)		Dark brown, dry, moderately loose, SAND and gravel fill Note: Woodard debris at ~1.5' bgs (PID = 0.4 ppmv)	PID = 0.4ppmv	Mounted Roadbox
2				Light brown, dry, moderately dense, SAND	PID = 0.1ppmv	Native Fill
4	21	6-16-12-37 (28)		Brown, dry, moderately dense, coarse to fine SAND, some gravel Note: WCSB-7 (2.5-3) collected for PCBs, MCP 14 Metals on 9/25/2013	PID = 0.3ppmv	
6	29	7-7-7-5 (14)		Gray, damp, moderately dense, coarse to fine SAND, little gravel (Fill noted, glass) Note: WCSB-7 (4-5) collected for VOCs, EPH, VPH on 9/25/2013	PID = 0.4ppmv	Bentonite Seal
8	29	9-4-5-5 (9)		Gray, moist, moderately dense, fine SAND, some silt Note: Orange discoloration noted in 5-6' bgs interval	PID = 0ppmv	Schedule 40 2" PVC Riser
10	96	1-1-1-1 (2)		Blackish, moist, moderately dense, SILT and fine sand Note: WCSB-7 (7.5-8.0) collected for VOCs on 9/25/2013 WCSB-7 (7.0-8.0) collected for MCP Metals and PCBs on 11/22/2013	PID = 0.1ppmv	
12	100	1-1-1-4 (2)		Dark brown, moist, dense, coarse SAND and silt	PID = 0ppmv	
14	67	5-4-4-5 (8)		Brown, saturated, very loose, coarse SAND and silt Gray, wet, dense, coarse SAND, some fine sand	PID = 0ppmv	
16	67	10-9-7-10 (16)		Gray, wet, moderately dense, coarse SAND, little fine sand, little gravel	PID = 0ppmv	Sand Filter Pack
18	88	11-11-11-9 (22)			PID = 0ppmv	2" PVC Screen
20	50	5-8-7-10 (15)			PID = 0ppmv	
22	58	3-4-5-12 (9)			PID = 0ppmv	
24	38	9-8-9-9 (17)			PID = 0ppmv	

Bottom of borehole at 24.0 feet.



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WELL NUMBER WCSB-8/ WCMW-8

PAGE 1 OF 1

CLIENT City of Quincy **PROJECT NAME** 175 & 189 Intervale Street
PROJECT NUMBER 226332.01 **PROJECT LOCATION** Quincy, MA
DATE STARTED 9/25/13 **COMPLETED** 9/25/13 **GROUND ELEVATION** _____ **HOLE SIZE** 2.0"
DRILLING CONTRACTOR Technical Drilling Services **GROUND WATER LEVELS:**
DRILLING METHOD Hollow stemmed auger ∇ **AT TIME OF DRILLING** 7.00 ft
LOGGED BY Ryan Smith **CHECKED BY** Jarrod Yoder **AT END OF DRILLING** ---
NOTES _____ **AFTER DRILLING** ---

WOODARD & CURRAN STANDARD - WC STD.GDT - 3/5/14 12:16 - I:\ANDOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SUBSURFACE SAMPLING\BORING LOGS\BORING LOGS.GPJ

DEPTH (ft)	RECOVERY %	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0						Standpipe (3.75' above ground)
0.8				Brown, loose, dry, SAND and organic debris	PID = 0.4ppmv	
1.5	75	6-13-15-22 (28)		Black, ASPHALT and/or coal (Odor noted)		Native Fill
2.0				Orange and brown, dry, dense, SILT and gravel	PID = 0.7ppmv	Bentonite Seal
2.5				Black with orange, dry, moderately dense, SAND and silt, little gravel		Schedule 40 2" PVC Riser
2.5	75	12-5-3-2 (8)		Note: WCSB-8 (2-2.5) collected for VOCs, EPH, VPH Orange and gray, moist to wet, dense, SILT	PID = 1ppmv	
2.5				Note: WCSB-8 (2.5-3) collected for PCBs, MCP 14 Metals		
6.0	50	2-1-1-1 (2)			PID = 0ppmv	
6.0				Black, wet, moderately dense, SILT, some coarse to fine sand	PID = 0.4ppmv	
7.0	67	4-2-3-3 (5)		Blackish gray, saturated, loose, SILT, some fine sand	PID = 0.3ppmv	
7.0				Note: WCSB-8 (7-8) collected for PCBs, VOCs, EPH, VPH	PID = 0ppmv	2" PVC Screen
8.0				Dark brownish maroon, moist, dense, SILT, trace sand (PEAT)	PID = 0.1ppmv	
10.0	100	1-1-1-1 (2)			PID = 0ppmv	
10.0				Dark brownish red, moist, dense, SILT, little fine sand (PEAT)	PID = 0ppmv	Sand Filter Pack
11.0	100	1-1-2-5 (3)		Gray, moist, moderately loose, coarse SAND, some fine sand	PID = 0ppmv	
12.0					PID = 0ppmv	

Bottom of borehole at 12.0 feet.

CLIENT City of Quincy

PROJECT NAME 175 & 189 Intervale Street

PROJECT NUMBER 226332.01

PROJECT LOCATION Quincy, MA

DATE STARTED 9/26/13 **COMPLETED** 9/26/13

GROUND ELEVATION _____ HOLE SIZE 2.0"

DRILLING CONTRACTOR Technical Drilling Services

GROUND WATER LEVELS:

DRILLING METHOD Hollow stemmed auger

5.00 **AT TIME OF DRILLING** 5.00 ft

LOGGED BY Ryan Smith **CHECKED BY** Jarrod Yoder

AT END OF DRILLING ---

NOTES

AFTER DRILLING _____

DEPTH (ft)	RECOVERY %	BLOW COUNTS (N VALUE)	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data	WELL DIAGRAM
0						
83		16-10-25-30 (35)		Brown, dry, moderately dense, coarse to medium SAND, some gravel Note: Fill observed (glass and plastic)	PID = 0.9ppmv	Flush Mounted Roadbox Native Fill
2				Dark brown, dry, very dense, SILT and sand (fill) Note: Fill observed (glass and plastic) WCSB-9 (1-2) collected for VOCs, EPH	PID = 9.8ppmv	Bentonite Seal
100		57-28-12-17 (40)		Dark brown with orange, dry, very dense, SILT (fill) Note: Fill observed (Glass, coal, plastic, and porcelain) WCSB-9 (2.5-3) collected for PCBs, MCP 14 Metals	PID = 1.1ppmv	Schedule 40 2" PVC Riser
4					PID = 1.6ppmv	
25		11-12-6-5 (18)		Brown, dry, loose, coarse to fine SAND, little gravel, little silt	PID = 0.7ppmv	
6					PID = 2ppmv	
21		5-6-4-4 (10)		Brown, saturated, loose, medium to fine SAND, little gravel, little silt	PID = 0.8ppmv	2" PVC Screen
8					PID = 0.6ppmv	
25		3-5-6-2 (11)		Gray, saturated, coarse SAND and gravel, some silt	PID = 0.1ppmv	
10				Gray, saturated, moderately loose, SILT	PID = 0.1ppmv	
42		5-2-1-1 (3)		Gray, saturated, loose, SILT, little gravel	PID = 0.1ppmv	Sand Filter Pack
12					PID = 0.1ppmv	
12.0						

Bottom of borehole at 12.0 feet



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BORING NUMBER WCCS-1

PAGE 1 OF 1

CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	500 Congress Street sampling		
GROUND WATER LEVELS:		AT TIME OF DRILLING	
		AT END OF DRILLING	
		AFTER DRILLING	

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
0.3			Brown, dry, loose, sandy TOPSOIL with mulch, leaves	PID = 9.2ppmv
			Brown, dry, loose, medium to fine SAND, little root debris	
1.0			Note: Fill observed (Plastic, asphalt) WCCS-1 (0.25-0.5) collected for PCBS, MCP 14 Metals	PID = 16.2ppmv
			Reddish brown, dry, moderately dense, sandy FILL	
2.0			Note: Fill observed (Asphalt, plastic, metal, foam)	PID = 0.7ppmv
			Black and brown, dry, loose, sandy FILL and asphalt	
	57		Note: WCCS-1 (2.5-2.75) collected for PCBs, MCP 14 Metals	PID = 0ppmv
5.0				
5.3			Brown, dry, loose, coarse to fine SAND, little silt, little root debris	PID = 0.6ppmv
			Note: WCCS-1 (5.0-5.5) collected for PCBs, MCP 14 Metals	
			Aliquot saved for potential future sampling; soil not characterized	
10.0	40			
			Bottom of borehole at 10.0 feet.	



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BORING NUMBER WCCS-10

PAGE 1 OF 1

CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	500 Congress Street sampling		
GROUND WATER LEVELS:		AT TIME OF DRILLING ---	
		AT END OF DRILLING ---	
		AFTER DRILLING ---	

WOODARD & CURRAN STANDARD - WC STD.GDT - 7/8/14 12:31 - I:\ANDOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SURFACE SAMPLING\BORING LOGS\BORING LOGS.GPJ

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0			Feet BGS	
0.3			Brown, dry, loose, sandy TOPSOIL with mulch, leaves	
0.8			Brown, dry, moderately dense, SILT and medium to fine sand, some gravel	
1.6			Note: WCCS-10 (0.5-0.75) collected for PCBs, MCP 14 Metals	PID = 0ppmv
1.9			Brown, dry, moderately loose, coarse to fine SAND, some silt, little gravel	
2			Note: WCCS-10 (2.5-3.0) collected for PCBs, MCP 14 Metals	PID = 0ppmv
2			Dark brown, dry, loose, medium to fine SAND and silt	PID = 0ppmv
3.0			Aliquot saved for potential future sampling; soil not characterized	
4				
5.0			Aliquot saved for potential future sampling; soil not characterized	
6				
8				
10				
10.0			Bottom of borehole at 10.0 feet.	



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BORING NUMBER WCCS-11

PAGE 1 OF 1

CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	500 Congress Street sampling		
GROUND WATER LEVELS:		AT TIME OF DRILLING ---	
		AT END OF DRILLING ---	
		AFTER DRILLING ---	

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0			Feet BGS	
0.5			Brown, dry, loose, sandy TOPSOIL with mulch, leaves	
1.3			Brown, dry, moderately loose, coarse to fine SAND, little gravel, little silt Note: WCCS-11 (0.75-1.0) collected for PCBs, MCP 14 Metals	PID = 0ppmv
2.0			Dark brown, damp, moderately dense, medium to fine SAND and silt, little gravel Note: WCCS-11 (2.5-3.0) PCBs, MCP 14 Metals Aliquot saved for potential future sampling; soil not characterized	PID = 0ppmv PID = 0ppmv
3.3				
5.0				
6.0			Aliquot saved for potential future sampling; soil not characterized	
8.0				
10.0				
Bottom of borehole at 10.0 feet.				



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BORING NUMBER WCCS-12

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
GROUND ELEVATION		HOLE SIZE	2.0"
DRILLING CONTRACTOR	Technical Drilling Services	GROUND WATER LEVELS:	
DRILLING METHOD	GeoProbe	AT TIME OF DRILLING	---
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
AT END OF DRILLING	---	AFTER DRILLING	---
NOTES	500 Congress Street sampling		

WOODARD & CURRAN STANDARD - WC STD. GDT - 7/8/14 12:31 - I:\ANDOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SUBSURFACE SAMPLING\BORING LOGS\BORING LOGS.GPJ

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
0.3			Brown, dry, loose, sandy TOPSOIL with mulch, leaves	
			Dark brown, dry, moderately dense, medium to fine SAND and silt	
			Note: Fill observed (Metal, plastic, wood, slag)	PID = 0ppmv
			WCCS-12 (0.75-1.0) collected for PCBs, MCP 14 Metals	PID = 0ppmv
			WCCS-12 (1.0-1.25) collected for PCBs, MCP 14 Metals	
			WCCS-12 (3.5-4.0) collected for PCBs, MCP 14 Metals	PID = 0ppmv
2				
2.0			Aliquot saved for potential future sampling; soil not characterized	
2.5				
4				
5.0			Aliquot saved for potential future sampling; soil not characterized	
6				
8				
10				
10.0			Bottom of borehole at 10.0 feet.	



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BORING NUMBER WCCS-13

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	500 Congress Street sampling		
GROUND WATER LEVELS:		AT TIME OF DRILLING ---	
		AT END OF DRILLING ---	
		AFTER DRILLING ---	

WOODARD & CURRAN STANDARD - WC STD. GDT - 7/8/14 12:31 - I:\ANDOVER\PROJECTS\226332 QUINCY MA - 175 & 189 INTERVALE STREET\WIP\SURFACE SAMPLING\BORING LOGS\BORING LOGS.GPJ

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0			Feet BGS	
0.3			Dark brown, dry, loose, medium to fine SAND and silt Note: WCCS-13 (0-0.25) collected for PCBs, MCP 14 Metals Blackish brown, damp, moderately dense, SILT and medium to fine sand, some gravel, trace fill Note: Fill observed (Metal, plastic) WCCS-13 (0.5-0.75) collected for PCBs, MCP 14 Metals WCCS-13 (3.0-3.5) collected for PCBs, MCP 14 Metals	PID = 0ppmv PID = 0ppmv PID = 0ppmv PID = 0ppmv
2	40			
4				
5.0			Aliquot saved for potential future sampling; soil not characterized	
6				
8	43			
10				
10.0			Bottom of borehole at 10.0 feet.	

CLIENT City of Quincy

PROJECT NAME 175 & 189 Intervale Street

PROJECT NUMBER 226332.01

PROJECT LOCATION Quincy, MA

DATE STARTED 5/12/14 **COMPLETED** 5/12/14

GROUND ELEVATION _____ HOLE SIZE 2.0"

DRILLING CONTRACTOR Technical Drilling Services

GROUND WATER LEVELS:

DRILLING METHOD GeoProbe


AT TIME OF DRILLING _____

LOGGED BY Ryan Smith **CHECKED BY** Jarrod Yoder

AT END OF DRILLING ----

NOTES 500 Congress Street sampling

AFTER DRILLING ---

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
			<p>Brown, dry, loose, sandy TOPSOIL with mulch, leaves</p> <p>Brown, dry, dense, medium to fine SAND, little silt, trace root/ wood debris</p> <p>Note: WCSS-2 (0.5-0.75) collected for PCBs, MCP 14 Metals WCSS-2 (1.5-1.75) collected for PCBs, MCP 14 Metals</p> <p>Brownish red, damp, dense, SAND and silt, some granite debris</p> <p>Note: Fill observed (Thick rubber, concrete, metal) WCCS-2 (4-4.5) collected for PCBs, MCP 14 Metals</p> <p>Aliquot saved for potential future sampling; soil not characterized</p>	<p>PID = 0.1ppmv</p> <p>PID = 7.2ppmv</p> <p>PID = 0ppmv PID = 0.8ppmv PID = 0ppmv</p>
2				
4				
6				
8				
10				
10.0			Bottom of borehole at 10.0 feet.	



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BORING NUMBER WCCS-3

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	500 Congress Street sampling		
GROUND WATER LEVELS:		AT TIME OF DRILLING	
		AT END OF DRILLING	
		AFTER DRILLING	

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0			Feet BGS	
0.3			Brown, dry, loose, sandy TOPSOIL with mulch, leaves	
			Light brown, dry, loose, fine SAND, little silt, little root debris	PID = 16.2ppmv PID = 4.4ppmv
1.0			Note: WCCS-3 (0.25-0.5) collected for PCBs, MCP 14 Metals	
			Brown, dry, moderately dense, medium to fine SAND and fill	
			Note: Fill observed (Plastic, coal, rubber)	PID = 8.8ppmv
1.8			Brown, moist, dense, medium to fine SAND, some silt	PID = 0ppmv
			Note: WCCS-3 (2.0-2.25) collected for PCBs, MCP 14 Metals WCCS-3 (4.5-5.0) collected for PCBs, MCP 14 Metals	PID = 0ppmv
5.0			Aliquot saved for potential future sampling; soil not characterized	
10.0			Bottom of borehole at 10.0 feet.	



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BORING NUMBER WCCS-4

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	500 Congress Street sampling		
GROUND WATER LEVELS:		AT TIME OF DRILLING	
		AT END OF DRILLING	
		AFTER DRILLING	

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
0.8			Brown, dry, loose, sandy TOPSOIL with mulch, leaves	PID = 2.4ppmv
2.0			Light brown, loose, dry, medium to fine SAND, some root debris, little silt Note: WCCS-4 (0.75-1.0) collected for PCBs, MCP 14 Metals WCCS-4 (1.5-1.75) collected for PCBs, MCP 14 Metals	PID = 1.4ppmv
3.3	75		Dark brown with orange, dry, moderately dense, medium to fine SAND and silt Note: Fill observed (Rubber, coal, plastic) WCCS-4 (4.0-4.5) collected for PCBs, MCP 14 Metals	PID = 0ppmv PID = 0ppmv
4.0			Pulverized GRANITE Note: Polished granite observed	PID = 0ppmv
5.0			Aliquot saved for potential future sampling; soil not characterized	
10.0	55		Bottom of borehole at 10.0 feet.	



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BORING NUMBER WCCS-5


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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	500 Congress Street sampling		
GROUND WATER LEVELS:		AT TIME OF DRILLING	
		AT END OF DRILLING	
		AFTER DRILLING	

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0			Feet BGS	
0.3			Brown, dry, loose, sandy TOPSOIL with mulch, leaves	PID = 12.9ppmv
			Brown, dry, moderately dense, medium to fine SAND, little silt	
			Note: WCCS-5 (0.25-0.5) collected for PCBs, MCP 14 Metals	
1.7				PID = 1.7ppmv
2			Reddish brown, moist, dense, SILT and medium to fine sand	PID = 0.4ppmv
			Note: Fill observed (Glass, plastic, asphalt, slag)	
			WCCS-5 (1.5-1.75) collected for PCBs, MCP 14 Metals	
2.7			Gray, moist, moderately dense, coarse to medium SAND	PID = 0ppmv
			Note: WCCS-5 (4.0-4.5) collected for PCBs, MCP 14 Metals	PID = 0ppmv
5.0			Aliquot saved for potential future sampling; soil not characterized	
10.0			Bottom of borehole at 10.0 feet.	

CLIENT <u>City of Quincy</u>	PROJECT NAME <u>175 & 189 Intervale Street</u>
PROJECT NUMBER <u>226332.01</u>	PROJECT LOCATION <u>Quincy, MA</u>
DATE STARTED <u>5/12/14</u> COMPLETED <u>5/12/14</u>	GROUND ELEVATION _____ HOLE SIZE <u>2.0"</u>
DRILLING CONTRACTOR <u>Technical Drilling Services</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>GeoProbe</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>Ryan Smith</u> CHECKED BY <u>Jarrod Yoder</u>	AT END OF DRILLING <u>---</u>
NOTES <u>500 Congress Street sampling</u>	AFTER DRILLING <u>---</u>

DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0		Feet BGS		
			Brown, dry, loose, sandy TOPSOIL with mulch, leaves	PID = 1.9ppmv
			0.5 Brown, dry, moderately loose, medium to fine SAND, little gravel, little silt	PID = 2.4ppmv
			Note: WCCS-6 (1.0-1.25) collected for PCBs, MCP 14 Metals	PID = 2.2ppmv
			1.5 Brown, damp, moderately dense, SILT and medium to fine sandy fill	
2			Note: Fill observed (Brick, porcelain, metal, plastic) WCCS-6 (2.0-2.25) collected for PCBs, MCP 14 Metals WCCS-6 (4.0-4.5) collected for PCBs, MCP 14 Metals	PID = 1ppmv
	53			PID = 0ppmv
4				
			5.0 Aliquot saved for potential future sampling; soil not characterized	
6				
8				
	77			
10				
			10.0 Bottom of borehole at 10.0 feet.	



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BORING NUMBER WCCS-7

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	500 Congress Street sampling		
GROUND WATER LEVELS:		AT TIME OF DRILLING ---	
		AT END OF DRILLING ---	
		AFTER DRILLING ---	

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
0.5			Brown, dry, loose, sandy TOPSOIL with mulch, leaves	PID = 1.3ppmv
			Brown, dry, loose, medium to fine SAND, little silt, little root debris	PID = 0ppmv
			Note: WCCS-7 (0.75-1.0) collected for PCBs, MCP 14 Metals WCCS-7 (1.25-1.5) collected for PCBs, MCP 14 Metals	
1.5			Dark brown, dry, moderately dense, sandy FILL	PID = 0ppmv
1.8			Note: Fill observed (Fiberglass, porcelain)	PID = 0ppmv
2.3			Tan, damp, moderately dense, medium to fine SAND	PID = 0ppmv
			Note: WCCS-7 (4.0-4.5) collected for PCBs, MCP 14 Metals Orange brown, moist, very dense, SILT	
4				
5.0			Aliquot saved for potential future sampling; soil not characterized	
6				
8				
10				
10.0			Bottom of borehole at 10.0 feet.	



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BORING NUMBER WCCS-8

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	500 Congress Street sampling		
GROUND WATER LEVELS:		AT TIME OF DRILLING	
		AT END OF DRILLING	
		AFTER DRILLING	

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
0.3			Brown, dry, loose, sandy TOPSOIL with mulch, leaves	PID = 0.1ppmv
			Light brown, dry, loose, medium to fine SAND, little silt, little root debris	
0.9			Note: WCCS-8 (0.33-0.66) collected for PCBs, MCP 14 Metals	PID = 1.3ppmv
			Gray brown, dry, moderately dense, coarse to fine SAND	
1.8			Note: Fill observed (Metal, coal)	PID = 0ppmv
			WCCS-8 (1.25-1.50) collected for PCBs, MCP 14 Metals	
			Orange gray, moist, dense, SILT, little medium to fine sand	PID = 0ppmv
			Note: WCCS-8 (3.75-4.25) collected for PCBs, MCP 14 Metals	PID = 0ppmv
5.0			Aliquot saved for potential future sampling; soil not characterized	PID = 0ppmv
10.0			Bottom of borehole at 10.0 feet.	



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BORING NUMBER WCCS-9

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	500 Congress Street sampling		
GROUND WATER LEVELS:			
AT TIME OF DRILLING		---	
AT END OF DRILLING		---	
AFTER DRILLING		---	

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION
0			Feet BGS
0.3			Brown, dry, loose, sandy TOPSOIL with mulch, leaves
			Dark brown, damp, moderately dense, coarse to fine SAND, some silt, little root debris
			Note: WCCS-9 (0.5-0.75) collected for PCBs, MCP 14 Metals
1.3			Dark brown, dry, moderately dense, medium to fine SAND and silt
1.8			Note: Fill observed (Brick, plastic, coal)
			WCCS-9 (1.0-1.25) collected for PCBs, MCP 14 Metals
2.3			Brown and orange, moist, dense, SILT, some medium to fine sand
3.0			Note: WCCS-9 (3.5-4.0) collected for PCBs, MCP 14 Metals
			Aliquot saved for potential future sampling; soil not characterized
5.0			Aliquot saved for potential future sampling; soil not characterized
10.0			Bottom of borehole at 10.0 feet.



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BORING NUMBER WCVS-1

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	40 Vernon Street sampling		
GROUND WATER LEVELS:		AT TIME OF DRILLING	
		AT END OF DRILLING	
		AFTER DRILLING	

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0				
			Feet BGS	
			0.3 Light brown, dry, loose, fine SAND, little silt	PID = 0ppmv
			Note: WCVS-1 (0-0.25) collected for PCBs, MCP 14 Metals	
			Brown, dry, moderately loose, medium to fine SAND, little silt, little organic/ root debris	PID = 0ppmv
			1.2 Black, dry, loose, sandy FILL	PID = 0ppmv
2			Note: Sandy fill materials appears to be fine coal/ tar	
			WCVS-1 (2.5-3) collected for PCBs, MCP 14 Metals	
			Gray, damp, moderately, loose, coarse to fine SAND and granite debris	PID = 0ppmv
4	47			
			5.0 Gravelly substrate with very poor recovery	
6				
8	10			
10				
			10.0 Bottom of borehole at 10.0 feet.	



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BORING NUMBER WCVS-2

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CLIENT	City of Quincy	PROJECT NAME	175 & 189 Intervale Street
PROJECT NUMBER	226332.01	PROJECT LOCATION	Quincy, MA
DATE STARTED	5/12/14	COMPLETED	5/12/14
DRILLING CONTRACTOR	Technical Drilling Services	GROUND ELEVATION	
DRILLING METHOD	GeoProbe	HOLE SIZE	2.0"
LOGGED BY	Ryan Smith	CHECKED BY	Jarrod Yoder
NOTES	40 Vernon Street sampling	GROUND WATER LEVELS:	
		AT TIME OF DRILLING	---
		AT END OF DRILLING	---
		AFTER DRILLING	---

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DEPTH (ft)	RECOVERY %	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0			Feet BGS	
0.3			Light brown, dry, loose, fine SAND	PID = 0ppmv
0.7			Note: WCVS-2 (0-0.25) collected for PCBs, MCP 14 Metals	
			Black, crumbled ASPHALT	PID = 0ppmv
			Brown, dry, moderately dense, medium to fine SAND, some gravel, some silt, trace fill material	
1.8			Note: Fill observed (Coal, plastic, slag, wood)	PID = 0ppmv
			WCVS-2 (2.5-3.0) collected for PCBs, MCP 14 Metals	
			Aliquot saved for potential future sampling; soil not characterized	PID = 0ppmv
3.0				
5.0				
			Aliquot saved for potential future sampling; soil not characterized	
10.0			Bottom of borehole at 10.0 feet.	